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Ontario. Legislative Assembly

SESSIONAL PAPERS

VOL. LIV.—PART IV.

THIRD SESSION

OF THE

FIFTEENTH LEGISLATURE

OF THE

PROVINCE OF ONTARIO

SESSION 1922

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No. **8** Report of the Provincial Municipal Auditor for the year 1921. Presented to the Legislature, 29th May, 1922. *Printed.*

No. **9** Report of the Commissioners for Queen Victoria Niagara Falls Park for the year 1921. Presented to the Legislature, 9th June, 1922. *Printed.*

No. **10** Report of the Superintendents of Insurance for the year 1921. Presented to the Legislature, 6th April, 1922. *Printed.*

No. **11** Report of the Registrar of Friendly Societies' Transactions for the year 1921. Presented to the Legislature, 6th April, 1922. *Printed.*

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No. **15** Report on Highway Improvement for the year 1921. Presented to the Legislature, 30th May, 1922. *Printed.*

No. **16** Report of the Department of Labour for the year 1921. Presented to the Legislature, 1st June, 1922. *Printed.*

No. **17** Report of the Minister of Education for the year 1921. Presented to the Legislature, 29th May, 1922. *Printed.*

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No. **21** Report of the Provincial Board of Health for the year 1921. Presented to the Legislature, 1st June, 1922. *Printed.*

No. **22** Report upon the Ontario Hospitals for Insane, Feeble-minded and Epileptic for the year, 1921. Presented to the Legislature, 9th June, 1922. *Printed.*

No. **23** Report on Hospitals for Idiots. *Included in No. 22.*

No. **24** Report of Hydro-Electric Railway Commission. Presented to the Legislature, 24th February, 1922. *Printed.*

No. **25** Report upon Hospitals and Charitable Institutions for the year 1921. Presented to the Legislature, 9th June, 1922. *Printed.*

No. **26** Report upon the Prisons and Reformatories of the Province for the year 1921. Presented to the Legislature, 8th June, 1922. *Printed.*

No. **27** Report upon Neglected and Dependent Children for the year 1921. Presented to the Legislature, 8th June, 1922. *Not Printed.*

No. **28** Report upon the working of the Ontario Temperance Act for the year 1921. Presented to the Legislature, 8th June, 1922. *Printed.*

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No. **32** Report of the Agricultural and Experimental Union for the year 1921. Presented to the Legislature, 15th May, 1922. *Printed.*

No. **33** Report of the Stallion Enrolment Board. *Not presented.* (*Printed.*)

No. **34** Report of the Vegetable Growers Association for the year 1921. Presented to the Legislature, 1st June, 1922. *Printed.*

No. **35** Report of the Corn Growers Association. *Not presented.*

No. **36** Report of the Entomological Society for the year 1921. Presented to the Legislature, 1st June, 1922. *Printed.*

No. **37** Report of the Bee-Keepers Association for the year 1921. Presented to the Legislature, 1st June, 1922. *Printed.*

No. **38** Report of the Dairymen's Association for the year 1921. Presented to the Legislature, 1st June, 1922. *Printed. See Sessional vol. for* 1923.

No. **39** Report of the Live Stock Branch of the Department of Agriculture for the year 1921. Presented to the Legislature, 1st June, 1922. *Printed.*

No. **40** Report of the Housing Commission. *Not presented.*

No. **41** Report of the Women's Institutes of the Province for the year 1921. Presented to the Legislature, 1st June, 1922. *Printed.*

No. **42** Report of the Horticultural Societies for the year 1921. Presented to the Legislature, 1st June, 1922. *Printed.*

No. **43** Report of the Agricultural Societies and of the Convention of the Association of Fairs and Exhibitions for the year 1921. Presented to the Legislature, 31st May, 1922. *Printed.*

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No. **52** Report of the Bureau of Archives for the year 1921. Presented to the Legislature, 20th April, 1922. *Not Printed.*

No. **53** Report of the Librarian on the state of the Library. Presented to the Legislature, 1st May, 1922. *Not Printed.*

No. **54** Report of the Provincial Auditor for the year 1920-21. Presented to the Legislature, 20th April, 1922. *Printed.*

No. **55** Report of the Workmen's Compensation Board for the year 1921. Presented to the Legislature, 1st June, 1922. *Printed.*

No. **56** Copies of Regulations and Orders-in-Council made under the authority of the Department of Education or of the Acts relating to Public Schools, Separate Schools or High Schools. Presented to the Legislature, 22nd February, 14th March, 21st March, 5th April, 12th April, 25th April, 11th May, 29th May and 9th June, 1922. *Not Printed.*

No. **57** Interim Report of the Commission respecting Sheriffs appointed to inquire, consider and report upon best mode of selecting and remunerating Sheriffs, etc., etc. Presented to the Legislature, 24th February, 1922. *Printed.*

No. **58** Return to an Order of the House of the Twenty-fourth day of February, 1922, for a Return showing—1. The total cost as shown by the records in the Department of Highways of the work on the Kingston Highway at the east end of the Village of Pickering in the summer of 1921, where the highway was lowered almost to the level of the highway before construction work commenced—showing (*a*) Cost of excavation in summer of 1921; (*b*) Cost of surfacing road after excavation of 1921; (*c*) Total cost of all work done by reason of change in level of road in summer of 1921. 2. The original cost of filling the hollow when the road was originally built. 3. The original cost of surfacing the portion which was broken up in the summer of 1921. 4. By whose orders the change in the surface of the road was made in the summer of 1921. Presented to the Legislature, 24th February, 1922. *Mr. Sinclair. Not Printed.*

No. **59** Report of the Ontario Board of Parole for the year ending 31st October, 1921. *Printed.*

No. **60** Report of the Commission under the Extra-Mural Employment of Sentenced Persons Act, for 1921. Presented to the Legislature, 28th February, 1922. *Printed.*

No. **61** Interim Report of the Public Service Commission, respecting the Toronto Police Court. Presented to the Legislature, 28th February, 1922. *Not Printed.*

No. **62** Letters and Documents in the matter of the Shevlin-Clarke Company, Limited. Presented to the Legislature, 7th March, 1922. *Not Printed.*

No. **63** An Agreement made on the Ninth day of February, one thousand nine hundred and twenty-two, between His Majesty, represented by the Honourable the Minister of Lands and Forests for the Province of Ontario, hereinafter called the Government, of the first part, and Lewis L. Alstead, Esquire, of the City of Milwaukee, in the State of Wisconsin, and George A. Seaman, Esquire, of the City of Chicago, in the State of Illinois, hereinafter called the Grantees, respecting a lease, or leases, of Water Power on Nipigon and Pic River. Presented to the Legislature, 8th March, 1922. *Not Printed.*

No. **64** Report of the Commission appointed to conduct an enquiry into the truth or falsity of charges relating to Toronto Police Court, etc. Presented to the Legislature, 14th March, 1922. *Not Printed.*

No. **65** Interim Report of the Public Service Commission respecting the Registry Office of the County of York. Presented to the Legislature, 16th March, 1922. *Printed.*

No. **66** Agreement in the matter of settlement of suits of the Shevlin-Clarke Company, Limited. Presented to the Legislature, 16th March, 1922. *Not Printed.*

No. **67** Report upon Blue Sky Legislation. Presented to the Legislature, 20th March, 1922. *Printed.*

No. **68** Statement on Distribution of Revised and Sessional Statutes. Presented to the Legislature, 21st March, 1922. *Not Printed.*

No. **69** Interim Report of the Public Service Commission, on the operation of Land Titles Act in Northern Ontario. Presented to the Legislature, 21st March, 1922. *Printed.*

No. **70** Report of the Commission to make inquiries and report upon all matters and things connected with or relative or incidental to the seizure on or about the 21st of April, 1920, of a car of whiskey at the City of Chatham, etc., etc. Presented to the Legislature, 22nd March, 1922. *Not Printed.*

No. **71** Return to an Order of the House of 15th March, 1922, That there be laid before this House a return of copies of all documents, maps, correspondence and papers dealing with the purchase, expropriation or acquiring of a certain property occupied as the Presbyterian Manse at the Village of Vernon, in the County of Carleton, at the Department of Highways, or any official thereof. Presented to the Legislature, 22nd March, 1922. *Mr. Ferguson. Not Printed.*

No. **72** Return to an Order of the House of 28th February, 1921, That there be laid before this house a Return showing:—1. All fines

and confiscations of property under The Game and Fisheries Act for each of the years 1916-17-18-19-20, imposed by game wardens, overseers or other representatives of the Department. 2. The number of such cases brought before a Magistrate of which there is any record for each year as above, and the numbers of recorded convictions. 3. The amounts for each year received by the Government and the amounts paid each year to informers. 4. Copies of instructions issued to game wardens, overseers or other representatives from time to time during the period 1912-20, dealing with the method of levying fines and directing seizure of property. Presented to the Legislature, 22nd March, 1922. *Mr. Hall. Not Printed.*

No. **73** Report of the Minimum Wage Board for the year 1921. Presented to the Legislature, 23rd March, 1922. *Printed.*

No. **74** Report of the Commission to investigate the Organization, Discipline, Administration and Efficiency of the Police Court of the City of Brantford. Presented to the Legislature, 5th April, 1922. *Not Printed.*

No. **75** Return to an Order of the House of Sixth of March, 1922, That there be laid before this House, a Return of copies of all correspondence and other documents between the Attorney-General's Department, the Ontario License Board, the Provincial Police Department, or Provincial Secretary's Department and any person or persons in Brantford having to do with the administration of justice for the City of Brantford or County of Brant since October 20th, 1919, to date. Presented to the Legislature, 7th April, 1922. *Mr. MacBride. Not Printed.*

No. **76** Return to an Order of the House of 30th April, 1921, That there be laid before the House a return of all copies of all correspondence between the Minister of Lands and Forests, the Prime Minister or any member of the Government, and E.W. Backus, or any other company, firms, or person, together with all estimates, reports, advertisements, conditions of sale, tenders, agreements, maps, documents and papers of every kind and nature relating to:—1. The Lake of the Woods pulp concession. 2. The White Dog Rapids Water Power, or any other water power in the District of Kenora. 3. The recent sale of pulp wood and timber on the English River concession. Presented to the Legislature, 10th April, 1922. *Mr. Ferguson. Not Printed.*

No. **77** Return to an Order of the House of 30th April, 1921, That there be laid before the House a Return of copies of all correspondence, papers, plans, reports and documents between the Minister of and the Federal Government and any Minister or official thereof, Highways, or any member of the Government or any official thereof,

with reference to contribution under The Canada Roads Act towards the construction of Highways in Ontario. Presented to the Legislature, 10th April, 1922. *Mr. Henry. Not Printed.*

No. **78** Return to an Order of the House of 10th March, 1922, That there be laid before this House, a return of copies of all correspondence between the Minister of Lands and Forests, the Prime Minister, the Attorney-General, or any Member of the Government and E. W. Backus or any person on his behalf or any other company, firm or person, together with all estimates, reports, advertisements, conditions of sale, tenders, agreements, maps, documents, memoranda and papers of every kind and nature relating to (1) The Lake of the Woods pulp concession; (2) The White Dog Rapids water power or any other water power in Ontario; (3) The English River Pulp concession; (4) The Keewatin Lumber Company; (5) The Keewatin Power Company. Presented to the Legislature, 18th April, 1922. *Mr. Ferguson. Not Printed.*

No. **79** Report of the Public Service Superannuation Board for the year 1921. Presented to the Legislature, 19th April, 1922. *Printed.*

No. **80** Regulations of the Provincial Board of Health for sanitary control of Lumber, Timber and Mining Camps. Presented to the Legislature, 19th April, 1922. *Printed for distribution.*

No. **81** Return to an Order of the House of 29th March, 1921, That there be laid before the House a Return showing: 1. What is the number of applications to the Board of License Commissioners, or any Commissioner, Official or Minister for the remission of fines or sentences under the O.T.A. in regard to which the member for South-East Toronto (Seat "B") acted personally or was interested professionally. 2. (*a*) What is the number of such applications favourably considered; (*b*) Rejected. 3. (*a*) What is the total sum of fines under the O.T.A. remitted in regard to which the member for South-East Toronto (Seat "B") acted personally or was interested professionally; (*b*) What is the aggregate number of fines remitted from sentences imposed under the O.T.A. in regard to which the member for South-East Toronto (Seat "B") acted personally or was interested professionally Presented to the Legislature, 19th April, 1922. *Mr. Pinard. Not Printed.*

No. **82** Copy of Commission issued to Walter Dymond Gregory, *et al* to inquire into and report upon the estimates and other matters relating to the Queenston-Chippawa Power Development in pursuance of Order-in-Council, dated 13th April, 1922, thereto annexed. Presented to the Legislature, 19th April, 1922. *Not Printed.*

No. **83** Return to an Order of the House of 29th April, 1921, That there be laid before this House, a Return of the Report of the officer, or person, who has been conducting a scale of the logs and mill-cut

at twenty-six lumber mills of Ontario throughout the sawing season of 1920. and which the Minister of Lands and Forests has reported to the House is now in his possession, together with the data on which the Report was based and all correspondence in connection therewith. Presented to the Legislature, 20th April, 1922. *Mr. McCrea. Not Printed.*

No. **84** Return to an Order of the House of 21st April, 1922, That there be laid before this House, a Return showing how many timber limits have been offered for sale since December 1st, 1919, and where situated. 2. Were they all sold by tender. 3. How long was each sale advertised. 4. The date of sale, area and price paid. 5. How many tenders were received in each case. 6. The name of the successful tenderer. Presented to the Legislature. 24th April, 1922. *Mr. McCrea. Not Printed.*

No. **85** Report and Statement of the Ontario Athletic Commission and of Auditor, for the year 1921. Presented to the Legislature, 25th April, 1922. *Not Printed.*

No. **86** Return to an Order of the House of 26th April, 1922, That there be laid before this House, a return showing the quantity of timber removed by the Keewatin Lumber Company in the District of Kenora each year during its cutting operations upon Berths S2, S3, S4, 3, 4, 6, 7, 10, 12, G9 and G10, 21 and 20. Presented to the Legislature, 28th April, 1922. *Mr. Mathieu. Not Printed.*

No. **87** Return to an Order of the House of 15th March, 1922, That there be laid before this House a Return of copies of all letters, telegrams or other correspondence during the year 1921, between any Minister of the Government or of any Member or Officer of the Ontario License Commission with any person or Corporation relating to the charges laid against Constable Lefevre, Provincial Police Force, and Constables Fleming, McKenzie and Michaud, the North Bay Police Force. Presented to the Legislature, 28th April, 1922. *Mr. Stover. Not Printed.*

No. **88** Return to an Order of the House of April 29th, 1921. That there be laid before this House, a return of copies of all Correspondence between R. T. Harding and the Honourable the Attorney-General, or any other Minister of the Crown, or any Officer of the Government since March 1st, 1921, with reference to a certain account for $500 rendered James Hourigan & Co. by the said R. T. Harding, and also copies of all letters from Crown Timber Agent Wylie since 1st June, 1920, referring to the settlement with James Hourigan & Co. for $12,600. Presented to the Legislature, 1st May, 1922. *Mr. Hill. Not Printed.*

No. **89** Report of the Mothers' Allowances Commission for the year 1921. Presented to the Legislature, 3rd May, 1922. *Printed.*

No. **90** Return to an order of the House of 12th April, 1922. That there be laid before this House, a Return of all copies of all correspondence, memoranda and reports between the Toronto and Hamilton Highway Commission and the Minister of Public Works or any member of the Government since November 15th, 1919. Presented to the Legislature, 11th May, 1922. *Mr. Henry. Not Printed.*

No. **91** Report of the Ontario Civil Service Commissioner for the year 1921. Presented to the Legislature, 12th May, 1922. *Printed.*

No. **92** Statement showing sums credited to The Highway Improvement Fund and all payments chargeable thereto as of October 31st, 1921. Presented to the Legislature, 12th May, 1922. *Not Printed.*

No. **93** Report of the Soldiers' Aid Commission of Ontario for the year 1921. Presented to the Legislature, 16th May, 1922. *Not Printed.*

No. **94** Statements showing all sums credited to the Highway Improvement Fund and all payments chargeable thereto for the fiscal years ending October 31st, 1920, and 1921, respectively. Presented to the Legislature, 23rd May, 1922. *Not Printed.*

No. **95** Return to an Order of the House of 9th February, 1921, That there be laid before this House, a Return of copies of all letters of instruction or other correspondence from the Attorney-General or any of the members of the Government, or Officials, addressed to any Police Magistrates or Crown Attorneys in the Province of Ontario; and any communications or letters in reply thereto relating to the imposition of penalties, or the trial of cases, and their disposition under The Ontario Temperance Act and amendments thereto. Presented to the Legislature, 30th May, 1922. *Mr. Dewart. Not Printed.*

No. **96** Return to an Order of the House of 25th May, 1922, that there be laid before this House, a Return showing (1) What Legislative Grants were earned in each of the years 1920 and 1921 by (*a*) Rural Public Schools, (*b*) Rural Separate Schools, (2) What was the actual amount paid to each Rural Public and Separate School for the said years. Presented to the Legislature, 6th June, 1922. *Mr. Cooke. Printed.*

No. **97** Report of the Agricultural Development Board for the year 1921. Presented to the Legislature, 8th June, 1922. *Not Printed.*

No. **98** Copies of Order-in-Council designating, pursuant to section 14 of the Hospitals and Charitable Institutions Act, Hospitals, Refuges, Orphanages and Infants' Homes to which aid may be granted. Presented to the Legislature, 8th June, 1922. *Not Printed.*

No. **99**	Return to an Order of the House of 29th April, 1921, That there be laid before this House, a Return of copies of all correspondence, reports and documents, relating to the dismissal of Magistrate Hastings, of Dunnville. Presented to the Legislature, 9th June, 1922. *Mr. Price. Not Printed.*
No. **100**	Return to an Order of the House of the 20th March, 1922, that there be laid before the House a Return of copies of all correspondence between any Minister of the Crown and any member of the Hydro-Radial Commission in connection and dealing with accounts for remuneration of services by each and every member of the Commission whether such accounts were paid in full for the amount claimed or reduced in amount. Presented to the Legislature, 9th June, 1922. *Mr. Hay. Not printed.*
No. **101**	Return to an Order of the House of the 24th February, 1922, that there be laid before the House a Return of all papers, documents, memoranda, recommendations, letters, telegrams and communications of every kind between any Municipal corporations, associations, bodies or persons and the Prime Minister or any Minister of the Government regarding the appointment or suggestion to appoint Peter Heenan, M.P.P. for Kenora, a Member of the Hydro-Electric Power Commission of Ontario. Presented to the Legislature, 9th June, 1922. *Mr. Thompson. Not Printed.*

REPORT

OF THE

Minister of Public Works

FOR THE

PROVINCE OF ONTARIO

FOR THE

TWELVE MONTHS ENDING 31st OCTOBER

1921

PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO

TORONTO:
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1923

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To His Honour, HENRY COCKSHUTT, ESQ.,

Lieutenant-Governor of the Province of Ontario.

MAY IT PLEASE YOUR HONOUR:

As required by law I submit for the information of Your Honour and the Legislative Assembly, the Annual Report of the works under the control of the Public Works Department, comprising the Reports of the Deputy Minister, the Architect, the Engineers, the Accountant and Law Clerk, for the twelve months ending the 31st of October, 1921.

Respectfully submitted,

F. C. BIGGS,
Minister of Public Works and Highways.

Department of Public Works, Ontario,
Toronto, March 6th, 1922.

REPORT

OF THE

Deputy Minister of Public Works

Toronto, March 6th, 1922.

Honourable F. C. Biggs,
Minister of Public Works and Highways.

Sir,—I have the honour to transmit the reports of the Provincial Architect, the Provincial Engineer, the Secretary and Law Clerk and the Accountant of the Public Works Department regarding the works carried on by the Department for the fiscal year ending October 31st, 1921.

The repairs and maintenance of the Parliament and Departmental Buildings includes the properties in the city used for offices by several departments of Government. Spadina House (Old Knox College building) is occupied by the Department of Labour and Health, and the Registrar-General branch of the Provincial Secretary, the rental, fuel, water and light, and cleaning of building being charged to the repair and maintenance appropriation. The maintenance and repair of No. 46 Richmond Street West, numbers 5, 15, 17 and 47 Queen's Park, also the rental of part of the McLean Publishing Company's building on University Avenue is also chargeable to repair and maintenance appropriation.

The principal buildings under construction during the year are as follows:

Parliament and Departmental Buildings.—To provide additional accommodation for the Departments of Government, No. 47 Queen's Park, purchased in 1920, was fitted up for the Ontario Railway and Municipal Board. A hearing room was constructed on the north side of the building with an entrance from St. Albans Street, large vaults were also built for the safety of important documents and maps and some slight changes made in the partitions. The building makes very convenient and comfortable quarters for the Board. The old Knox College building at Spadina Crescent, rented in October, 1920, has been converted into an admirable building for offices and laboratories of the Department of Labour and the Provincial Board of Health. Large vaults and fireproof offices for the Registrar-General's branch were constructed, making safe housing for the vital statistics of the Province and bright fireproof working rooms for the officials in charge. No. 25 Queen's Park, purchased in June, 1921, from the Trustees of St. Michael's College, is being fitted up for the Ontario Board of License Commissioners and staff, and the Provincial Police.

Educational Buildings.—The work upon the reconstruction of the main building for the School for Deaf, Belleville, has made good progress. The front part of the new building is nearing completion, after which the old building may be taken down and work on the new building continued until fully completed. Extensive changes are being made in the Normal School building at Toronto, to improve the general plan and give better lighting to the classrooms. The English-French Training School at Sturgeon Falls was completed and occupied after the Easter holidays. The Architect's branch of the Department has given much time in advising the Inspector of Public and Separate Schools in the designing of public schools. The Architect has also given much time in inspection of plans of Technical Schools in several parts of the Province.

Agricultural Buildings.—The main building, containing the classrooms for the Ontario Agricultural School at Kemptville, was completed shortly after the close of the fiscal year 1920. The Students' Residence building was commenced early in the year and completed in an expeditious manner during the year. These buildings were erected from the Federal subsidy for the encouragement of agriculture.. A new veterinary college building and a new dairy building are in course of erection at the Ontario Agricultural College, Guelph, and good progress has been made.

Public Institution Buildings.—The work of construction at the Ontario Hospital, Whitby, has been continued steadily throughout the year. The Acute Hospital for women is completed and ready for occupation. The Acute Hospital for men is roofed in and the interior work well advanced. A number of cottages for guards were completed and occupied early in the year. The construction works being carried on by the Public Works Department at Burwash Industrial Farm were completed early in the year and the buildings transferred to the Provincial Secretary's Department. The building and equipment are in excellent condition. The work of reconstruction of Orchard House at the Ontario Hospital, Hamilton, after the fire, was completed and equipped and occupied before the end of the fiscal year, the new work being of fireproof construction.

District Buildings.—The work on the new Court House at Sault Ste. Marie was suspended for some time. In the spring of 1920 the contractors were unable to proceed owing to the great advance in prices of labour and materials. The Department paid them for the work done by them and revised the plans and specifications and let a new contract on March 15th, 1921. The work has been pushed on vigorously and excellent progress made.

More extended reference to the above and other buildings will be found in the Architect's report.

The Engineers' Branch of the Public Works Department has charge of inland navigation in the Province, the construction of bridges in Northern Ontario and parts of counties bordering on the unorganized districts, the construction of drainage in Northern Ontario and the inspection of drainage under the Provincial Drainage Aid Act. The weather conditions for public works were very favourable during 1921. The navigation works undertaken during the year consisted of dredging in the Huntsville chain of lakes, the canal between Peninsula and Fairy Lakes has been completed, also the work in the Muskoka River between Fairy and Marys Lake. Extensive repairs were

made to the docks at Port Carling. The bridges constructed consist of six steel bridges, twenty-five concrete bridges and eighty-five timber bridges varying in length from twenty feet to four hundred feet. Drainage works costing $30,000 were constructed by the Department and many drainage schemes in older Ontario were inspected by the Engineer of the Department.

The report of the Secretary and Law Clerk will give a list of contracts entered into during the fiscal year. The report of the Accountant will give the expenditure by the Department under the Supply Bill.

I have the honour to be,

Sir,

Your obedient servant,

R. P. Fairbairn,
Deputy Minister of Public Works.

REPORT OF ARCHITECT.

Honourable F. C. Biggs,
Minister of Public Works and Highways.

Sir,—I have the honour to report on the works carried on and works completed during the past fiscal year ending October 31st, by the Architect's Branch of your Department.

Government House.—Only such repairs as were necessary were made to the residence and outbuildings, including the lodge, employees' houses and greenhouses. The buildings were suitably decorated for the farewell reception of His Excellency the Duke of Devonshire. The grounds, walks, drives and gardens have been kept in good order.

Parliament Buildings.—Repairs have been made, as required from time to time, to the buildings and equipment, several minor alterations having been made in the north wing, necessitated by the removal of the Board of Health and Registrar-General's Branch of the Provincial Secretary's Department, to the offices prepared for them in the Government Office Building, formerly known as Old Knox College, now called Spadina House. In this building, the offices formerly occupied by them on the first floor of the north wing of the Parliament Buildings have been handed over to the Department of Education and the Deputy Provincial Registrar, and have relieved to a considerable extent the overcrowded and congested condition of this part of the building. Improvements and additions were made to the heating, ventilating and lighting of the building.

The offices of the Department of Labour have been removed from No. 15 Queen's Park and No. 46 Richmond Street West, to Spadina House, being located on the first and second floors, including the Factory Inspectors and Boiler Inspectors. The offices formerly occupied by these Departments at No. 46 Richmond Street West have been allotted to the Mothers' Allowance Commission, who have recently moved to their new quarters.

The alterations, additions and improvements to No. 47 Queen's Park were completed and the building occupied by the Ontario Railway and Municipal Board early in the year.

The addition to the garage, No. 15 Queen's Park, was completed and the building occupied in December.

Knox College.—The old Knox College Building, located on Spadina Crescent, which has been leased by the Government, has been remodelled and an addition erected to the north-east wing, to give vault and office accommodation for the Registrar's Branch of the Provincial Board of Health and fully equipped laboratories have been provided for this Department on the first second and third floors of the north-west wing. The laboratories in connection with the Board of Health at No. 5 Queen's Park, have been moved to this building. The space formerly occupied by them at No. 5 Queen's Park is now occupied by the Mines Department, who now occupy the whole of this building. The whole of the offices of the Provincial Board of Health and Registrar's Department have been moved to the apartments prepared for them in this building.

Osgoode Hall.—The buildings have been kept in good repair, about the usual amount of painting having been done to the corridors and offices. The grounds have been kept in their usual good order.

PUBLIC INSTITUTIONS.

The only work carried out by this Department at the Institutions, with the exception of the Ontario Hospital, Whitby, consisted of the reconstruction of the Orchard House, Ontario Hospital, Hamilton, which was damaged by fire on the 23rd of February, the roof of the upper storey being demolished by fire and the whole of the upper storey destroyed, with the exception of the brick walls, of which it was only necessary to take down a few courses and rebuild. Considerable damage was done by water to the floors below. A number of chimneys, however, had fallen, and several had to be taken down. The whole of the work was rebuilt in good time and considerable improvements made in the reconstruction of the upper floor, with a view to providing against damage by fire. The whole of the ceilings of the upper floor have been covered with a cement slab, as the fire originated in the roof, as have several other fires at our Institution. Work was done under day labour, all materials being purchased by tender by this Department.

A new water supply system has been installed at the Ontario Hospital, Kingston, the work being done under the supervision of your Engineer, Mr. Halford. Considerable work was done by our electricians in laying new conduit for electric wiring on the grounds and buildings.

A fire alarm and fire protection system has been installed by our electricians at the Ontario Hospital, Orillia. The renewal of fixtures in the main building has been completed. An activated sludge sewage disposal system has been installed in the grounds of this Institution, through which the sewage from the whole of the buildings is passed. This work was done under the supervision of Mr. Allen, of this Department, under the direction of Mr. Dallyn, Sanitary Engineer for the Provincial Board of Health. The apparatus is working satisfactorily.

Steam boilers and machinery at the Institution have been inspected and reported on by Mr. W. H. Bradt, Boiler Inspector of this Department, who has also supervised the erection of boilers, etc.

Ontario Hospital, Whitby.—Work was continued on the Acute Hospital for Women, which is about finished and can be occupied whenever required. Good progress has been made with the Acute Hospital No. 2 for men, the excavations for foundations being commenced in December. At the time of writing this building is roofed. The plumbing and heating is well under way, temporary heat being provided for, and the work will be continued throughout the winter, and the building will be ready for service by June 1st.

The tunnel for steam and other piping leading from the power plant to No. 1 Acute Hospital has been completed. Another tunnel, connecting Nos. 1 and 2 Acute Hospitals, has also been completed. The grounds surrounding these buildings have been graded and walks and roads leading thereto have been laid.

A great deal of attention has been given the other portions of the grounds, including grading, sodding and planting. This work will be continued next season.

Industrial Farm, Burwash.—All of the work at this Institution, which was being carried out by this Department, has been completed and handed over to the Provincial Secretary's Department, who are now responsible for the care of same.

EDUCATIONAL.

The Normal Schools in Hamilton, Stratford and North Bay and the Normal and Model Schools in Toronto and Ottawa, have received the necessary attention of the officials of your Department. Repairs and alterations have been made as required.

Normal and Model School, Toronto.—Extensive alterations have been commenced in this building, the intention being to remove the Normal School from the North Building to the front building (the original Normal School) and the Model School to the north building. It is proposed to demolish the present Model School building which obstructs the light on the north and south sides of the other buildings respectively, and erect a one-storey building between the two with space enough on each side to give ample light to the other buildings.

The Compensation Board have removed from this building to more commodious offices in the Bond Building, Richmond and Sheppard Streets, the rooms vacated by them having been changed into class-rooms and offices for the School.

The Ontario College of Art has also removed its studios, located on the third floor, to the addition recently built to the Grange. A portion of the Museum on the second floor has been moved to the rooms vacated by the College of Art.

A large amount of work is entailed in connection with these alterations in removing the exhibits of the Museum and re-decorating the whole of the building. Additional furniture is also being supplied to the class-rooms.

Preliminary plans are also being prepared for the proposed extension of the Model School (north building), giving accommodation for four additional class-rooms.

Training School, Sturgeon Falls.—Plans and specifications were prepared for this building, tenders called for and the contract awarded to Jeffrey & Stevens, Contractors, North Bay, for general trades. Contract for plumbing and heating was awarded to McKelvey & Birch, of Kingston. The building has been completed and fully furnished.

Ontario School for Deaf, Belleville.—Work was resumed on the portion of the new main building (which was commenced last year) early in the spring. Good progress has been made with the work, the building has been roofed in and plastering is well under way. Steam heat is on in the building and work will be continued through the winter, and the building will be ready for occupation by next May. Plans have been prepared for the completion of the building. Owing to the unsatisfactory carrying on of the work done last year under contract, it was decided that the Department should carry out the work, purchasing all materials and hiring the men. This has been done so far as the stone, brick work and carpentry work is concerned, and has proved to be most satisfactory in every way. Capable foremen were

employed and labour troubles avoided. The work being done under contract includes roofing by Douglas Bros., of Toronto; steam heating and plumbing by Messrs. McKelvey & Birch, of Kingston; plastering by A. D. Grant, of Toronto; painting by Hart Brothers, of Belleville; the electric wiring by the Toronto Electric Co., of Toronto; iron stairs by the Canadian Ornamental Iron Work, of Toronto; marble, tile and terrazzo flooring by the Italian Mosaic & Tile Co., of Toronto; and mastic flooring by the Vulcan Asphalt and Supply Co. The building is two stories and basement in height, is designed in the Tudor Gothic style of architecture, consisting of a centre building and two wings, and is being built within 12 feet of the old main building, which will be demolished as soon as this portion of the new building is finished. The main entrance is in the centre of the lower front facade leading to a vestibule, from thence to the reception room, the floor at this portion being of tile. A cross corridor extends through the centre building with connecting corridors in the wings. The main staircase is located in the centre of the building, is of steel with marble steps and lighted by stained glass windows on the landing in the centre building. Provision is made for the Principal's and Bursar's offices on the first floor; the library and teachers' room are located on the upper floor in this part of the building. The building in all contains 22 class-rooms and when the wings are completed, will give eight more, making thirty in all, giving accommodation for 350 pupils. Ample play rooms, well lighted, are provided in the basement, the floors being of mastic. Good progress has been made with the work, and when completed it will be one of the most up-to-date of our educational buildings, in all of its appointments. Special attention has been paid to the heating and ventilating equipment, which has been designed by Mr. Melvern F. Thomas, C.E., who is also supervising the work.

Plans are being prepared for a new dining hall to accommodate 350, and a kitchen in connection with the main building, to take the place of the present dining hall and kitchen, which are inconvenient, badly lighted and too small to accommodate the increasing number of pupils. The dining hall, kitchen, bakery and cold storage will be under the same roof.

Plans are also being prepared for an Assembly Hall or Chapel, also in connection with the Main Building, with a seating capacity of 450 persons.

The main entrance drives and walks are being remodelled and relaid, particular attention being given to the planting of shrubs and laying out of flower beds. The buildings in connection with the School have been kept in good repair.

Ontario School for Blind, Brantford.—Repairs to buildings have been given proper attention. Cement walks to grounds in front of the building commenced last year, have been completed, the work being done under contract by Mr. J. Bartle, of Brantford.

School House at Matheson.—Plans and specifications were also prepared for a school house at Matheson, tenders were called for and the contract awarded to R. Wallace & Sons, Contractors, North Bay; the contract for plumbing and heating was awarded to A. Brazeau, of Timmins. This building has been completed and fully furnished.

Technical Schools.—Plans and specifications for the new Technical Schools being erected at Sudbury, Sarnia, Hamilton, Sault Ste. Marie and Windsor, were submitted by the Department of Education to your Department

for examination as to the structural work, which was figured out by the officials of this Department and reported on by myself. In each case structural changes were suggested by the Department, which the local architects agreed to and changed their plans in compliance therewith.

Rural Schools.—The following work was done by this Department in connection with Public, Separate and Consolidated Schools for the Department of Education: Working drawings have been prepared for Schools at Mindemoya, Savard, Dorion, No. 13 Seneca, Nobel, Barwick, Swastika, Stratton, Benmiller, and additions to Hudson School; also for alterations to Oneida and Low Banks Rural Schools, and Community Halls to all three and four-roomed schools. The buildings at Mindemoya, Dorion, Nobel, Barwick, Stratton and Swastika are in course of erection and nearing completion. Considerable alterations were also made to the Northern Academy, Monteith.

Sketch plans have been prepared for extensions to New Liskeard Public School, Sturgeon Falls Separate School, Delhi, Tamworth, Manitowaning Public Schools, and for proposed school at Cache Bay, Porquois Junction, Eagle River, Bruce Mines, Ignace, Bethany, Warsaw, Pickerel Landing, Virgil, Welland, Wellington and Smoky Falls, besides a number of one-roomed rural schools, for which duplicate plans only have been sent.

Sixteen sets of plans for schools by other architects have been submitted and reported on. The following schools have been visited and reported on for dilapidation, ventilation and questions of heating: Charlton, Minden, Canfield, MacTier, No. 13 Seneca, New Liskeard and Navan. In all, eight sites for schools have been reported on in the various districts, including Porquois Junction, Gore Bay, Savard, Cache Bay and Benmiller. There have been twenty meetings held with School Boards, either here or at Schools throughout the Province, in connection with various matters affecting the schools enumerated above.

The above work, including the preparing of plans, specifications and supervision, was assigned to Mr. Geo. White, Assistant Architect, who is to be commended for the energy and interest he has displayed, and credit is due him for successfully carrying on the work.

AGRICULTURE.

Ontario Agricultural College, Guelph.—Plans and specifications were prepared for a new Veterinary College and for a new Dairy Building, tenders called for and contracts awarded for the work of same as follows:

Construction work (general trades), for both buildings, Messrs. Schultz Bros., of Brantford; heating, ventilation and plumbing of the Veterinary College to Messrs. Sheppard & Abbott, of Toronto; heating, ventilation and plumbing of Dairy Building, Messrs. Purdy, Mansell, Limited, of Toronto; electric wiring of Veterinary College, Canada Electric Co., of Toronto, and of the Dairy Building to The G. B. Grinyer Co., of Guelph, the lowest tender being accepted in all cases. Owing to the difficulty in procuring stone, the work on these buildings was much retarded for time; fair progress is now being made and the indications are that both buildings will be roofed in before the end of December, and, unless something unforeseen occurs, will be completely finished and furnished in time for the fall sessions in 1922.

Agricultural School, Kemptville.—Plans and specifications were prepared for a residence for boys and girls in connection with this School, to accommodate about 100 students, conveniently located to the other buildings. Tenders were called for and the contract for structural work awarded to Messrs. Taylor & Lackey, of Ottawa, who have carried out their contract in a most satisfactory manner and in record time. Work was commenced in June and is now completed and the students are in residence. The contract for heating and ventilation was awarded to Messrs. Purdy, Mansell, Limited, of Toronto, who have also done their work in record time and in a satisfactory manner. The electric wiring and installation of fixtures were done by our own electricians. The building is built of cement foundation with brick superstructure, is two stories and basement in height, the upper storey plastered in stucco, the roof in blue slate, giving a very effective treatment. The building has a frontage of 160 ft., with wings extending 60 ft. at each end; a large dining hall with kitchen in the rear of same is located in the centre and is approached by corridors from girls' and boys' wings at the sides with an entrance from the front. Commodious verandahs extend in front of wings on both floors. The comfort and convenience of the students have been carefully considered in every detail in connection with this work. The building has been fully finished and equipped.

An activated sewage disposal plant has been installed in the low ground to take the sewage from the buildings in this group. The structural work and drainage was done by Messrs. Taylor and Lackey, and plumbing by Purdy, Mansell, Limited, of Toronto. The plans were prepared by Mr. E. M. Allen, of this Department, under instructions from Mr. Dallyn, Sanitary Engineer for the Provincial Board of Health.

Horticultural Experimental Station, Vineland Station.—Plans and specifications were prepared for the two double cottages for employees, which have been erected on the grounds. The whole of the work, with the exception of plumbing, heating, electric wiring and tinsmithing, has been carried out satisfactorily by day labour under a capable foreman, the materials being purchased by tender by this Department.

BUILDINGS IN THE DISTRICTS.

Court House, Sault Ste. Marie.—The contract for the completion of this building was awarded to Messrs. Stuart & Sinclair, of Hamilton, in June last, after tenders were called for and theirs being found to be the lowest. Good progress has been made with the work. Roads and walks are now being laid to the front and rear of the building.

Improvements have been made to the heating plant at the gaol in Sault Ste. Marie, which is now working satisfactorily.

Court House, Parry Sound.—Plans and specifications were made for an extensive addition to the Court House in Parry Sound, to give additional spaces for offices. Tenders were called for, the lowest being accepted and the following contracts awarded: for general trades, Messrs. Stuart & Sinclair, of

Hamilton; heating and plumbing by McTaggarts, of Parry Sound. The electric wiring will be done by our own men. The work will be continued throughout the winter and the building will be completed early in the year.

The buildings throughout the Districts, including Court Houses, Gaols and Registry Offices, have been kept in good repair. Inspection of them is made from time to time by the officials of the Department.

All of which is respectfully submitted.

I have the honour to be, Sir,

Your obedient servant,

F. R. Heakes,
Architect.

Toronto, October 31st, 1921.

REPORT OF ENGINEER.

HONOURABLE F. C. BIGGS,
Minister of Public Works and Highways.

SIR,—I have the honour to submit the annual report on the business of the Engineer's Branch of the Public Works Department during the fiscal year ending October 31st, 1921.

Exceptionally favourable weather for construction enabled the completion of all works for which funds had been provided. The work, as usual, was carried out by day labour under our regular staff of foremen. The only contracts entered into were for the furnishing of material for construction. The year's construction programme was the most extensive yet carried out by this department. The problem of unemployment is receiving attention throughout the country. An extensive program for winter's work has been arranged and it is the intention to keep the construction crews constantly employed.

On bridge work, the year's activities included the erection of six steel bridges, three on timber abutments and three on concrete. The largest of these was the Falardeau bridge on White River—three spans of 92 feet each—and the Mattawin bridge in Thunder Bay District—one span of 120 feet. Twenty-five concrete bridges were constructed. The largest of these were arch spans of 66 feet—on the Sauble River in Bruce County, and the South River, near Powassan, in Parry Sound.

Eighty-five timber bridges were constructed, varying in length from 20 feet to 400 feet.

On drainage work, the usual programme was followed in the different districts. Favourable weather for work allowed us to complete all the work projected. About $30,000 was expended on this line of work.

For Public Institutions, plans were prepared for water supply and drainage systems.

DREDGING.—The dredge belonging to the Department continued work in the Huntsville waters, completing the channel at the canal between Peninsula and Fairy Lakes. The narrows at Huntsville were also improved. Buoys were placed to mark dangerous shallows. The work at Huntsville is complete and the dredge machinery is being moved back to Lake Muskoka to resume work at Bracebridge and Port Carling, where improvements are badly needed.

The expenditure from the Maintenance fund was unusually heavy. A great number of public works, bridges and dams, constructed with timber, are rapidly going to decay. The repair and renewal of these works is rapidly mounting in cost. This year about $80,000 was expended on this work. The heaviest expenditures were on the Huntsville Locks, Dollars Dam and Magnetawan Dam. The latter work is to be renewed in masonry during the coming winter.

The most important expenditures from the Maintenance fund in the different districts were as follows:

RECAPITULATION.

MAINTENANCE EXPENDITURE.

General.

Tools, repairs to equipment, etc.	$2,125 18	
Storehouse, freight, cartage, etc.	216 96	
Superintendent's Office, expenses	276 00	
		$2,618 14

Navigation.

Operation of Dredge	$9,008 97	
Repairs, Port Carling Lock and Bridge	184 01	
" Magnetawan Lock and Bridge	303 43	
" Huntsville Lock and Bridge	5,877 48	
" Norman Dam	564 03	
" Dollars Dam	6,239 43	
" Magnetawan Dam	2,143 47	
" Deer Lake Dam	268 64	
" Tea Lake Dam	603 24	
" Bala Dam	86 08	
		$25,278 78

Repairs and Renewal of Bridges.

Rainy River District:		
Bergland Road Bridges	$284 40	
Grassy River Bridge, McCrosson	423 44	
Mather Bridge, 8 and 9, Con. 1	247 28	
Morley Bridges, Secs. 34 and 35	153 00	
Manitou Bridges	45 00	
Sec. 13 Bridge, Dobie	431 28	
		$1,584 40
Kenora District Bridges:		
Anderson Road Bridges	$27 50	
Keewatin Town Bridges	985 93	
Industrial School Bridge	271 67	
Lunn Bridges	47 90	
Pellatt Road Swing Bridge	88 96	
Pelletier Bridge, Mellick	347 80	
Pigeon, Wabigoon and Southworth Bridges	784 28	
Rice Creek Bridge	340 53	
Thunder Creek Bridge, Zeeland	190 60	
Sandford Bridge, Con. 2	284 25	
Sandford Bridge, Con. 5	389 85	
Wabigoon Bridge, 4th, Sandford	2,193 86	
		$5,953 13
Thunder Bay District:		
Marks Bridge, Con. 3	$189 36	
Pitch Creek Bridge, Con. 3, O'Connor	356 13	
Sunshine Bridge, Dawson Road	100 00	
Whitewood Creek Bridge, Con. 4, O'Connor	406 70	
		$1,052 19
Sault Ste. Marie District:		
Goulais Bridge, Fenwick	$296 33	
Goulais Bridge, Van Horne	490 00	
		$786 33
Algoma District:		
Alma Creek Bridge	$153 76	
Dausey Bridge	198 75	
Graham Bridge, Little Serpent	286 96	
Galbraith Bridge, Con. 2	147 26	
Haines Bridge, Con. 4, Aberdeen	386 70	

Algoma District—Continued		
La Cloche Bridges	$ 2,129 34	
Little Rapids Bridge	562 11	
Little Serpent Bridge, Shedden	1,027 12	
Thessalon Bridge, Con. 2, Galbraith	193 83	
Mud Creek Bridge, Con. 6, Bright	122 50	
Mississaga Bridge, Thompson	996 85	
Victoria Bridge, Sec. 35	127 50	
Wings Bridge	1,671 85	
Thessalon Bridge, Con. 5	538 70	
		$8,543 23
Sudbury District:		
Garson Road Bridge	$75 94	
Hagar Bridge, 10 and 11, Con. 2	101 00	
Morgan Vermilion Bridge	85 00	
McPhee Bridge, Hagar	19 16	
Vermilion Bridge, Balfour	712 17	
		$993 27
Manitoulin District:		
Indian Point Bridge	$115 60	
		$115 60
Sturgeon Falls District:		
Appleby Bridge, Con. 1	$218 00	
Deer Creek Bridge, Kirkpatrick	398 74	
Deer Creek Bridge	455 70	
Deer Creek Bridge, Hugel	417 23	
Deer Creek Bridge, Con. 2, Ratter	411 25	
Deer Creek Bridge, Con. 1	110 00	
Dunnett Bridge, Con. 4	539 35	
Grant Field Twp. Bridge	161 23	
Hagar Siding Bridge	505 95	
McCarthy Creek Bridge	558 76	
River Valley Bridge	759 31	
Shea's Bridge	524 29	
Smoky Creek Bridge, Grant	801 02	
Warren Steel Bridge	484 83	
Veuve Bridge, Lot 9, Dunnett	27 00	
		$6,372 66
Temiskaming District:		
Elk Lake Bridge	$733 54	
Harley Bridge, Con. 4	102 27	
Harley Kerns T.L. Bridge	697 39	
Henwood Bridge, Lot 1, 2nd	173 30	
Henwood Bridge, Lots 10 and 11, 6th	154 19	
Hilliardton Scow Ferry	406 95	
Little Otter Bridge, Hilliardton	284 00	
Kerns T.L. Steel Bridge	404 50	
Jean Baptiste Bridge, 5th, Henwood	2,629 49	
White River Bridge Protection	387 97	
Wabis Bridge Timber Salvage	315 51	
Wabis Bridge, Harley Dymond	278 56	
Wabis Bridge, Uno Park	1,905 37	
Barber Timber Camp	6,267 77	
		$14,740 81
Nipissing District:		
Boom Creek Bridge	$140 21	
Cheney Creek Bridge	166 25	
Madawaska Steel Bridge	390 17	
Sharp's Creek Bridge, Boulter	50 00	
		$745 63
Parry Sound District:		
Bella Lake Bridge	$267 25	
Bethune Bridge, 5, Con. 10	100 06	
Black Water Bridge, McKellar T.L.	246 36	

Parry Sound District—Continued		
Burpee Bridge, Con. 2	$ 61 50	
Commanda Bridge, Con. 10, Pringle	401 25	
Commanda Bridge, Con. 7, Lount	144 00	
Golden Valley Bridge, Con. 9, Pringle	112 27	
Ferguson Lake Bridge	352 50	
Pickerel Creek Bridge, Con. 1, McConkey	259 23	
South Seguin Bridge, Monteith	197 00	
Steidler Bridge, Shawanaga Road	958 89	
Whitestone Bridge	599 00	
Wolf River Bridge, Con. 5, Hardy	192 00	
		$3,841 31
Muskoka District:		
High Bridge, Mary River	$466 69	
Joseph River Bridge	243 65	
Port Sandfield Bridge	95 03	
		$805 37
Victoria and Haliburton:		
Oxtongue Bridge, McClintock	$230 68	
Haliburton Bridges	194 56	
		$425 24
North Hastings:		
Egan Creek Bridge	$99 75	
		$99 75
Addington:		
Haddock Bridge	$100 05	
Beaver Lake Bridge	128 49	
		$228 54
Renfrew:		
Dam Lake Bridge, Radcliffe	$100 50	
Combermere Bridge	78 40	
Consta Creek Bridge	299 00	
McMaster Bridge, Raglan	185 00	
McMaster Bridge, Lyndock	392 50	
Slack Bridge	200 00	
Silver Creek Bridge, S. Algona	34 30	
Whalen Creek Bridge, Brudenel	76 50	
White Lake Bridge, Raglan	200 00	
		$1,566 20
Repainting Steel Bridges, Muskoka and Simcoe		1,626 35

Lockmasters' Reports.

The movements of boats at the different locks were as follows:

	Steamers	*Small Boats*	*Scows*	*Rafts*
Port Carling	6,019	367	628	118
Huntsville	340	535	302	251
Magnetawan	711	274	98	405

WORKS CONSTRUCTED UNDER SPECIAL APPROPRIATIONS.

Rainy River District—Bridges.

Burris Bridge, 10 and 11, Con. 4.—Located over a creek on the 10 and 11 side-road, Con. 4. It is a timber bridge, 45 feet long, supported by 4 bents of piles. Caps and stringers 10" flatted tamarac; floor 3" tamarac plank. Approaches well graded. Cost $508.80.

First Concession Bridge, 8 and 9, Mather.—Located over the north branch of Sturgeon Creek on the 8 and 9 side line of Mather. A pile trestle, 45 feet long, with 3 spans of 15 feet each; has caps and stringers of 10" flatted tamarac, floor 3" tamarac plank, railing 4" x 4" pine; approaches well graded. Cost $810.05.

Lash-Devlin Bridge, Sec. 30.—Located over a small creek on the Lash-Devlin boundary west of Sec. 30, Lash. A pile trestle bridge with a clear span of 16 feet. Caps and stringers are 10" flatted tamarac, cover 3" tamarac plank. The approaches are well filled and a good strong guard rail is placed on bridge and fill. Cost $609.38.

McKelvie Bridge.—Located over a deep ravine on the River Road in the Township of McIrvine. The bridge is a pile trestle structure, 180 feet long. Piles run in length from 20 to 40 feet. Piles and bents are well braced and driven at 16 foot centres. Caps and stringers are of white pine. Caps are 10" x 10" and stringers 8" x 10". Floor is 3" tamarac plank. A strong guard rail is placed on each side of bridge. The fill at the east end is constantly sliding in and displaces the pile bents. The sliding is caused by springs in the bank. To remedy this, a covered drain has been placed between the natural bank and the fill, to cut off the water. The total cost of the bridge was $2,327.00.

River Road Bridge, Morley.—Located over a ravine at lot 46 on the River Road in the Township of Morley. A pile trestle bridge, 75 feet long, with 5 spans of 15 feet each. Caps are 10" x 10" tamarac; stringers 8" x 10" tamarac; floor 3" tamarac plank. Approaches are well graded and strong guard rails in place. Cost $1,178.83.

South Pine Bridge, 31 and 32, Morley.—Located over the south branch of the Pine River on the road between Secs. 31 and 32, Morley. It is a pile trestle, 75 feet long, of the same construction as above-described bridge. Cost $971.50.

Sturgeon Bridge, 8 and 9, Con. 6, Dobie.—Located over the east branch of the Sturgeon River on the road between Lots 8 and 9, Con. 6, Dobie. It is a pile trestle bridge, 40 feet long, with 3 spans of 13' 4" each. Standard construction. Cost $628.72.

Worthington Bridge, Lots 40 and 41.—Located over a small creek at the line between Lots 40 and 41, on the river road in Worthington. It is a pile

bridge, with a clear span of 16 feet. The approaches are well graded. Cost $589.76.

Mr. Frank Clement, Road Inspector, was in charge of all the bridge work in Rainy River. By securing timber during the preceding winter, he was able to keep the cost of his work considerably below the estimated cost.

Kenora District Bridges.

Anderson Road Bridges.—Two small bridges on the Anderson Road in Jaffray and Mellick. The bridges have a clear span of 12 feet. The abutments are of rubble masonry. The stringers and floor are of flatted tamarac. Extensive fills were placed at each end of the bridges. Cost $785.20.

Mission Bridges, Kenora.—Situated over a creek at the Industrial School at Kenora. It is a timber structure, with a 20-foot span and timber crib abutments. The grading of approaches through marsh was the most expensive part of the work. Total cost $479.67.

Pelletier Bridge, Mellick.—This was repair work, consisting of renewing 172 feet of flooring, repairing the railing and putting on a few sway braces. Cost $496.00.

Rice Creek Bridge, Mellick.—Located over Rice Creek at Lot 4, Con. 4, Mellick. A timber bridge on timber crib piers. It has a centre span of 24 feet, with a 12-foot span at each end. Overall length 80 feet. Cost $570.71.

Beaver Bridge, 2nd Line, Sandford.—Located over Beaver Creek at Lot 6, on the 2nd line of Sandford. A pile trestle bridge, 112 feet long, with pile bents driven at 16-foot centres. Roadway 14 feet clear. Caps, stringers and floor flatted tamarac. D. Hutchison was foreman in charge. $1,057.10 was the cost.

Wabigoon Bridge, Con. 4, Sandford.—Located over the Wabigoon River at Lot 2 on the 4th line of Sandford. A timber truss bridge, 176 feet long. It has a centre truss span of 60 feet, with a King truss span and a 16-foot trestle span at each end. Pile piers carry the deck. The main two or centre piers are enclosed in timber cribs to resist the ice pressure. Pile timber was secured from Crown Lands in the vicinity and the flooring was procured from the Keewatin Lumber Co. The bridge is painted and well constructed. The approaches are well graded. Total cost $5,193.66. Mr. Dan Hutchison was foreman in charge.

Thunder Bay District Bridges.

Mattawin Bridge, Dawson Road.—Located over the Mattawin River at Sunshine on the Dawson Road. It is a steel bridge on concrete abutments. It has a clear span of 120 feet and has 6 panels of 20 feet each. Roadway is 14 feet clear width. The abutments of concrete are 13 feet in height to the floor level and rest on solid rock. Extensive fills of rock are required at each end. This season the abutments were constructed and the steel erected. The concrete floor will be laid next spring and the approaches completed. The steel

span was supplied by the Hamilton Bridge Works at a cost of $4,630.00. To date, $8,000.00 has been expended on the bridge and it will take $1,000.00 to complete the work. Mr. S. W. Butt was foreman in charge.

Silver Mountain Road Bridge.—Located over a creek at Lot 7, Con. 5, Gillies. It is a timber bridge with a clear span of 20 feet. Cost $470.67.

Sixth Concession Bridge, Beaver Creek, Gillies.—Located over Beaver Creek, on the Hymers Road, between Lots 6 and 7, Gillies. A timber bridge with a clear span of 16 feet. Cost $431.53.

Slate River Bridges, 2nd Line, Paipoonge.—The Slate River makes an oxbow bend at Lots 9 and 10, making a double crossing of the 2nd line of Paipoonge. The old timber bridges were completely played out. Two new timber bridges were constructed. The bridge at Lot 10 has a centre span of 50 feet, with approach spans of 18 feet at each end, giving an overall length of 86 feet. Roadway is 14 feet. Double pile piers carry the truss. Single pile piers are driven at each end. The truss members, caps and corbels are 10" x 12" pine. Piles are of tamarac, well braced. Stringers are 10" flatted tamarac and floor is of 3" pine plank. Guard rail in place

The bridge at Lot 9 follows the same construction as the bridge at Lot 10. It has a centre span of 60 feet, with approach spans of 20 feet 6 inches at each end, giving an overall length of 101 feet. The double pile piers that carry the truss span are 5 feet wide; are provided with cut-waters. The cut-water and face of pier are sheeted with 3" plank. The bridges are well painted with everjet paint. The approaches are well graded and gravelled. $2,811.59 was expended on the two bridges.

Sunshine Creek Bridge, 2nd Line.—Located over Sunshine Creek, on the 2nd Line. It is a timber bridge, 36 feet long. $404.19 was expended on the bridge.

Sault Ste. Marie District Bridges.

Gore Bridge, Sections 21 and 22, Korah.—Located over a creek on the line between Sections 21 and 22, Korah. It is a concrete bridge, with a clear span of 15 feet. The abutments are 4 feet 6 inches wide at the base and 9 feet in height to the floor level. The 6 inch concrete floor slab is supported by 4 main beams, 12" wide and 15" deep. Each beam is reinforced with four 1" square twisted steel bars. The floor is reinforced with 5/8" square bars. The railing is of moulded concrete posts, bedded in the floor and supported at the top by a reinforced concrete rail. The top rail is supported by 3 main posts 12" x 12", reinforced with 5/8" bars. The approaches are well graded. Total cost $1,005.95.

Root Bridge, Sections 8 and 9, Tarentorus.—Located over the north branch of the Root River on the road between Sections 8 and 9 in Tarentorus. It is a concrete beam bridge with a clear span of 30 feet. The abutments rest on a secure gravel bottom and are 8 feet in height to the floor level. The 6" concrete floor slab is carried by 4 main beams 12" wide and 30" deep. Each beam is reinforced with 5 bars, 1" square twisted steel. The floor is reinforced with

5/8" square bars. The railing is standard moulded concrete posts. Very heavy fills were placed at each end of the bridge to build up a proper roadway. Total cost of bridge $1,840.72.

Searchmont Bridge, Goulais River.—Located over the Goulais River, at Searchmont, in the Township of Hodgins. This bridge consists of two steel spans of 80 feet each on timber pile piers. A 16-foot trestle span is placed at each end of the steel, giving an overall length of 202 feet. The centre pier consists of a double line of piles. 21 piles are placed in the pier. The piles are enclosed in a heavy timber crib built up to high-water level, and filled with stone. The piers are built with a cut-water faced with steel plate. The shore piers consist of double lines of piles. The piers are 6 feet wide and are finished with wings on the up-stream end. The face of the pier and wings is sheeted with 3" plank. The fill at each end falls to a natural slope around the shore bent of piles.

The steel was supplied by the Dominion Bridge Co., at a contract price of $6,125.00. All work, including erection and painting of steel, was under the direction of S. W. Butt, Public Works Foreman. The total cost of the bridge was $12,887.70.

Algoma District—Bridges.

Bridgeland Road Bridges—Located over the Little Thessalon River, on the Bridgeland road, in the Township of Bridgeland. Two timber bridges are built on the same plan and are about 2 miles apart, the first being about 6½ miles north of Little Rapids. The bridges are 72 feet long over all. The centre span is 32 feet clear, supported on cedar cribs, well cross-tied and drift-bolted, and filled with stone. A 3" fine plank floor carries the traffic. It is supported by a king truss of 10" x 12" timbers. The approaches are well graded. Cost $1,507.00.

Cummings Creek Bridge, Gould.—Located on a creek at Lot 5 on the 2nd line of Gould. It is a timber bridge, 50 feet in length. Expenditures $285.00.

Dunn's Rapids Bridge, Galbraith.—Located over the east branch of the Little Thessalon River at Lot 4, Con. 3, Galbraith. It is a timber bridge, 68 feet in length, 14 foot roadway. It has a centre span 28 feet clear, supported by timber cribs, well drift-bolted and filled with stone. Stringers are 10" x 12" pine. 3" hemlock floor. Approaches are well graded and there is a strong guard rail in place. Cost $528.00.

Galbraith Bridge, Con. 2.—Located in McPhee's Valley, on the Ophir-Dunn Valley Road, Con. 2, Galbraith. It is a timber bridge, 14 feet long, built of cedar. The floor is carried on pile bents. The approaches are built up of stones and earth. A strong guard rail is placed on each side of bridge and fill. Cost $579.37. The fill is the expensive part of the work.

McLeod's Bridge, Con. 4, Aberdeen.—Located over a creek at Lot 12, Con. 4, Aberdeen. The old bridge was 32 feet long. The new timber bridge is 20 feet long, built entirely of cedar. Pile bents carry the floor. A new fill of stone

was placed at each end of bridge and top-dressed with gravel. A strong guard rail is placed at each side of bridge and fill. Cost $431.56.

Shakespeare Bridge, Lot 7, Con. 1.—Located in a ravine at Lot 7, Con. 1, Shakespeare. It is a cedar box culvert, 44 feet long, 4 feet wide and 3½ feet high, inside measure. The ravine is filled above the culvert. The fill is 12 feet high and 20 feet wide on top. 800 yards of earth and stone were placed in the fill. The fill is top-dressed with 18 inches of gravel. Cost $400.00. Jas. Barkley, road inspector, was in charge of the construction of all these bridges.

Station Bridge, Bar River.—Located over Bar River at Bar River Station, on the road between Sections 3 and 4, Laird. It is a concrete pile trestle, 54 feet 8 inches in length. It has a centre span, 20 feet long with end spans of 15 feet each. The floor system is carried on 4 bents of concrete piles. The piles in the two centre bents are 30 feet long and in the two shore bents 25 feet long. Each pile is reinforced with 4¾" bars, with spiral winding of No. 7 wire. Concrete caps are placed over the heads of piles. Four main beams carry 6" floor slab, reinforced with 5/8" bars. On the centre span, the beams are 12" wide and 15" deep and on the end spans, the beams are 12" wide and 12" deep. Each beam is reinforced with 4 steel bars, 1" square, with stirrups of No. 7 wire. The railing is of moulded concrete posts. At each end of the bridge a fill of stone is placed. The fill is allowed to fall to a natural slope. An excavation is made for the toe of the slope, to bring the stone below the bed of the river and prevent the displacement of the stone through scour. Cost $2,040.51. S. W. Butt was foreman in charge.

Sucor Creek Bridge, Johnston.—Located over Sucor Creek, on the Desbarats Road, the west town line of Johnston. It is a concrete beam structure, with a clear span of 15 feet. The abutments are of concrete and are 9 feet high to the floor level. A 6" floor slab is carried on 4 beams. The beams are 12" wide, 15" deep, reinforced with four 1" square twisted steel bars. The railing is the standard, with moulded concrete posts. The approaches were well graded. Cost complete, $1,460.00. Walter Robinson was foreman in charge.

Manitoulin District—Bridges.

Assiginack Bridge.—Concrete abutments; seven lines of cedar stringers. 3" cedar plank floor, clear width 12 feet; strong guard rail in place and approaches well graded and gravelled. Total cost, $298.92.

Barrie Island Bridge.—Located over the narrow channel between Barrie Island and the mainland at Con. 7, Gordon. The bridge has a clear width of 8 feet. Rubble masonry abutments and a 12" floor slab, reinforced with 5/8" square bars. The balance of the channel, which is shallow, is filled with rock and top-dressed with gravel. Total cost, $1,136.46.

Beaudoin Creek Bridges, Baldwin.—No. 1, located over Beaudoin Creek, at Lot 6, Con. 2, Baldwin. It is a timber bridge with a clear span of 20 feet. All cedar timber. Abutments and cribs are filled with stone; stringers and floor

are of flatted cedar and approaches are well graded. A good strong guard rail is placed at each side of the bridge and fill.

No. 2 bridge is located over the same creek at Lot 7, Con. 6, Baldwin. It is a timber bridge with a clear span of 16 feet of the same construction as No. 1. Cost of both bridges, $695.92.

Black Creek Bridge.—Located over Black Creek at Lot 8, on the line between Cons. 3 and 4, Baldwin. A timber bridge with a clear span of 16 feet, cedar crib abutments, stone filled. Stringers and floor are of flatted cedar. Cost $291.20.

Gore Bay Main Street Bridge.—Located over a creek on the main street in the town of Gore Bay. It is a concrete bridge, with a length of 40 feet and a clear width of 10 feet. The walls are 10 feet in height to the floor level and are 3 feet 6 inches wide at the base. The floor is a 12″ slab reinforced with 5/8″ square twisted bars. The creek valley is well graded to the street level. Cost $1,500.00. Walter Robinson was foreman in charge.

Ice Lake Bridge, Allan.—Located over Ice Lake Creek at Lot 18, Con. 9, Allan. The bridge has a clear span of 18 feet. Rubble masonry abutments set in cement mortar. Stringers and floor are of flatted cedar. A king truss supports the floor. Approaches are well graded and gravelled. Cost $554.40.

Indian Point Bridge.—The old pivot pier at the Indian Point swing bridge has become badly battered with ice and logs at the up-stream face The upper corner adjacent to the channel was also badly battered by boats and scows. To guard against further damage to the pier, a new guard pier, 16 x 24 feet, was built just above the pivot pier and joined to it. This new pier is strongly built of heavy timber, well cross-tied and drift-bolted. It is filled with stone to high water level. The top timbers on the pivot pier were removed and replaced with new timbers, 12″ x 12″ square. A new base of concrete was placed beneath the timber under the pivot. This concrete base, which is 2 feet thick, rests on the stone filling of the pier. The swing span was properly lined up and balanced and is now in good working condition. Walter Robinson, Foreman Public Works, was in charge of the work. Cost $2,730.00.

Turtle Creek Bridge, Sheguiandah.—Located on Turtle Creek on the road between Lots 20 and 21, Con. 4, Sheguiandah. It is a concrete beam bridge with a clear span of 25 feet. The bottom is rock and the abutments are 6 feet in height to the floor level. The 6″ floor slab, reinforced with 5/8″ bars, is carried on four concrete beams. These beams are 24″ deep and 12″ wide and are reinforced with five 1″ square twisted bars. The railing is of standard moulded concrete posts. A long fill is placed at each end of the bridge in the creek valley. A strong guard rail is placed at each side of the fill. Walter Robinson was foreman in charge. Total cost, $1,956.00.

Willett Creek Bridge, Gordon.—Located on Willett Creek, at Lot 15 on the 7th Con. Road of Gordon. It is a concrete bridge with a clear span of 11 feet. The bottom is rock and the abutments are 9 feet in height to floor level. The floor is a 12″ slab, reinforced with 5/8″ bars at 8″ centres. The railing is of moulded concrete posts. The approaches are well graded. Walter Robinson was foreman in charge. Cost $794.00.

Sudbury District Bridges.

Neelon Bridge.—Located over Whitefish Creek at Lot 3, Con. 1, Neelon. The bridge has a span of 20 feet, rubble masonry abutments 8 feet high; a timber deck of flatted cedar, floor and stringers. A heavy fill is placed at each end of the bridge. The fill is faced with stone. Cost $613.36.

Hagar Creek Bridge, Lot 2, Con. 4.—Located over Hagar Creek at Lot 2, Con. 4, Hagar. It is a timber bridge with a clear span of 16 feet, and timber crib abutments, 14 x 17 feet and 5 feet high, stone-filled. Stringers and floor 10" flatted cedar. Approaches well filled. Guard rail on each side of bridge and fill. Cost $215.25.

Sixth Concession Bridge, Lot 9, Hagar.—Located over a creek, an arm of the north branch of the Veuve River, at Lot 9 on the 5th and 6th Concession line. It is a timber bridge 46 feet long, with a clear span of 30 feet on timber crib abutments, stone filled. The floor span is supported by a king truss. The stringers are of 10" flatted cedar. Floor 5" flatted jack-pine. The old bridge was 80 feet long. The approaches are well filled with earth and rock. A guard rail is placed on each side of bridge and fill. Cost $497.60.

Whitson Creek Bridge, 5th Line, Rayside.—Located over Whitson Creek on the 5th Con. line of Rayside. It is a pile trestle bridge, 75 feet long, with pile bents driven at 15 foot centres. The caps and stringers are of 10" flatted cedar. Floor 3" pine plank. Strong guard rail on each side of bridge. A. L. McDonald, Foreman Public Works, looked after the construction of these bridges. Approaches properly graded. Cost $808.00

Sturgeon Falls District Bridge.

Casimir-Jennings Bridges.—No. 1.—Located over a creek at Lot 6, on the Appleby-Jennings townline. A timber bridge with a clear span of 12 feet. The abutments are cedar pile piers. The piles were set in holes 6 feet deep bored with a 10" auger. Caps and stringers 10" flatted cedar. Floor flatted tamarac. Approaches well graded. No. 2.—Located over a creek at Lot 7, on the same townline. This bridge is of the same size and construction as the bridge at Lot 6. No. 3.—Locally known as Cherrifiles bridge, is located over a creek at Lot 10 on the Appleby-Jennings townline. It has a clear span of 14 feet and follows the same construction as the above described bridge. No. 4.—Located over a creek at Lot 7, Con. 2, Casimir. It has a clear span of 12 feet and follows the same construction as the bridges described. No. 5.—Located at Lot 9, Con. 5, Casimir. It has a clear span of 12 feet on the same line of construction as the others described. No. 6.—Two bridges over a creek on the road between Lots 6 and 7 in Con. 1, Appleby. The bridges have a clear span of 15 feet and constructed on the same plan as bridge No. 1, described above.

Janes Bridge, Sturgeon River.—Located at the elbow in the Sturgeon River in the township of Janes. The Sturgeon Valley Road follows the north side

of the river to the elbow. Here a crossing is necessary for the further extension of the road. The new bridge consists of a steel span 70 feet long on timber pile abutments. The balance of the bridge is a pile trestle of 7 spans of 16 feet each, giving a total length of 190 feet. The pile piers supporting the steel consist of double rows of piles, 4 feet apart, 21 piles in each pier. The main pier in the stream is enclosed in a strong timber crib, filled with stone to high water level. The main shore pier is sheeted with 3" plank. Five piles are driven in each bent in the trestle and the piles are well braced. The floor is of 3" pine plank. A strong guard rail is placed at each side of the bridge.

The steel span, including floor joist was supplied by the Hamilton Bridge Works, at a contract price of $1,698.00. All work in connection with the bridge, including the erection of the steel was done under the direction of A. L. McDonald, Foreman Public Works. Total cost, $6,282.00.

Southern Bridge, Sturgeon Falls.—This bridge was erected last year, but the work was not fully completed. The work was continued this year and the bridge was opened to traffic in July.

Temiskaming Bridges.

Barlow Bridge, Con. 6, Armstrong.—Located over a creek at Lot 2 on the road between Cons. 5 and 6 of Armstrong. The bridge is a pile trestle. The pile bents were placed and capped, new flatted stringers were put on (6 lines) and a new floor of 3" tamarac plank put on. The hills on each side were cut down and 1400 yards of earth were placed in the fill. A strong guard rail 130 feet long was placed at each side of bridge and fill. $419.00 was expended on the work.

Falardeau Bridge, White River.—Located over White River at Lot 4 on the road between Con. 5 and 6, Casey. The bridge has an over-all length of 340 feet. It comprises 3 steel spans of 90 feet each centre to centre bearings. At the west end the approach is a pile trestle of 48 feet of 3 spans. At the east end, the approach is a single span of 16 feet.

The two centre piers are built of piles enclosed in stone-filled timber cribs. The cribs are 12 feet wide and 32 feet long with an angled cutwater up stream. An ice-breaker, consisting of a single row of piles extends up stream from the pier. The piles are capped with a heavy timber. The timber is sheeted with a 12 by 12 steel angle.

A 16 foot frame bent is built up from the head of the piles in the pier. This frame bent carries the steel. The outer piers are of heavy piles, which extend full height to the bridge seat. The steel spans are provided with steel floor joist. The flooring throughout consists of 3" pine and tamarac plank. The steel spans are furnished with a pipe railing and the approaches are finished with a wooden guard rail.

The steel was furnished by the Hamilton Bridge Works at a contract price of $9,588.00.

All the work in connection with the bridge, including erection and painting of the steel was done under the direction of C. R. Dolmage, Foreman Public Works. The total cost of the bridge was $22,000.00.

Harley-Casey Townline Bridge.—Located in a ravine in the 2nd. Con. on the townline between Harley and Casey. It is a concrete box culvert, 40 feet long, with wing walls 6 feet long at each corner. The culvert is 6 feet wide and 4′ 6″ high inside dimensions. The side walls are carried down 3 feet below the bottom of the stream and are 3′ 3″ wide at the base, and 18″ wide at the top. The top is a concrete slab, 12″ thick, reinforced with ⅝″ square twisted bars at 8″ centres. The fill is 9 feet above the top of the culvert, and is top-dressed with gravel. A strong guard rail is placed at each side of the fill J. W. Davis was foreman in charge. Cost $3,345.00.

Hudson Creek Bridge, Con. 2, Kerns.—A timber bridge located over Hudson Creek at Lot 6, Con. 2, Kerns. The bridge has an overall length of 92 feet. The centre span is 48 feet clear. Piers are 6 feet wide with a 16 foot approach span at each end. Truss timbers, needle beams, caps and corbels are 10 x 12 pine. Flooring is 3″ pine. Stringers 6 rows, 5 x 12 pine. Railing and posts, 4 x 4. Hub rail, 1½ x 8. The approaches are well graded. The truss timbers are dressed and well painted with Ever Jet paint. D. H. McIntosh was foreman in charge. Cost, $1,178.00.

Judge Bridge.—This work consisted of replacing the flooring of the bridge, 370 feet in length, with 3″ tamarac plank. New wheel guards were placed. The approach spans were levelled up. Broken sheeting of piers renewed. The approaches were regraded in proper manner. The west approach was raised 18″ for a distance of 100 feet. W. E. Kerr was in charge of the work. Cost, $757.85.

North Road Culvert.—Located in a ravine on the road leading north from New Liskeard in the 4th Concession of Dymond. The culvert takes the place of a long timber trestle. It is 40 feet long, with 6 foot wing walls at each corner. It is 4′ 6″ high and 6 feet wide inside dimensions. The side walls are 3′ 3″ wide at the base and extend down 3′ below the bottom of the ravine. The top slab, 12″ thick, is reinforced with ⅝ bars. The fill is 9 feet above the top of the culvert, being about 14 feet above the bottom of the ravine. Strong guard rails are placed at each side of fill. J. W. Davis was foreman in charge. Cost of work complete, $2,403.55.

Little Otter Bridge.—Located over the Little Otter Creek, at Lot 8, on the Ingram-Hilliard townline. It is a timber bridge, 68 feet long, with a centre span of 36 feet. The east pier is a pile crib and the west abutment is a timber crib, well bedded and filled with stone. The timbers are well drift-bolted. Approaches are well graded. The work was done under the direction of W. E. Kerr. Cost, $543.91.

North and Pine Street Bridges, New Liskeard. North Street Culvert. Located on a creek on the north road in the town of New Liskeard. This creek leads in from the country to the north and east of the town. It has been a difficult matter to maintain bridges, owing to the rapid erosion of the clay banks. To prevent further erosion, it was decided to put in a corrugated pipe culvert, with concrete collar or retaining wall, at each end. The pipe culvert is 40 feet long and 3 feet in diameter, and discharges into a wooden

apron to guard against erosion. The retaining wall is 34 feet long at the up-stream end. The roadway fill extends about 12 feet above the pipe.

Pine Street Culvert.—This culvert is located over the same creek as the north road culvert. It comprises a corrugated Pedlar pipe, 42 inches in diameter and 50 feet long. A concrete collar with wing walls is placed at the up-stream end. At the lower end, an abutment of square timber well drift-bolted, holds the fill. The pipe discharges on a timber apron, well bedded and bolted. The roadway fill extends about 12 feet above the top of the culvert. The cost of the two culverts which were built by the town of New Liskeard was $3,100.00. The department contributed $1,400.00 to the cost of the work. Sutcliffe and Neelands were engineers in charge.

Nipissing District Bridges.

Antoine Creek Bridge, Con. 6, Mattawan.—Located over Antoine Creek on Con. 6, Mattawan. It is a timber bridge, with a clear span of 30 feet. The piers are timber cribs 11x 16 and about 10 feet in height and filled with stone. The approaches are built up of stone. Timber wings are built up on the up-stream end, 50 feet long. These wings are timber cribs, 8 feet wide and 6 feet high. Strong guard rails are placed at each side of fill. Cost, $972.22.

Astorville Bridge.—Located over an arm of Lake Nosbonsing at the village of Astorville in the township of Ferris. The old timber bridge at this place is completely worn out. It is about 500 feet long. It was decided to abandon the wooden structure and build a causeway of earth and stone across the bay, leaving a small opening for a waterway. This causeway was commenced this season and 252 feet in length was constructed. A roadway 16 feet in width has been provided. The fill from 3 to 6 feet in height, is built above high-water level. The remaining timber structure was repaired with timber from the section of bridge removed. $1,998.00 was expended on the work.

Barbotte Creek Bridge, Con. 6, Calvin.—A timber bridge repaired. $132.00 was expended on the work.

Barrett Creek Bridge, Con. 24, Cameron.—A timber deck bridge, located over Barrett Creek on the 24th Concession of Cameron. The bridge has a clear span of 20 feet. The abutments are of stone and concrete 6 feet in height. The deck is cedar timber, heavy fills are placed at each end of the bridge. $500.00 was expended on the work

Chippewa Creek Bridge, Con. 3, Widdifield.—A timber deck bridge on abutments of stone and concrete. The abutments are 9 feet in height, span of 15 feet clear. Deck is of cedar. The fill at the north end of the bridge is 240 feet in length and at the south end the fill is 400 feet long. A strong guard rail is placed at each side of bridge and fill. $499.00 was expended on the work.

Dickson Bay Bridge.—Located over a creek at Dickson Bay in the township of Mattawan. A timber bridge with a clear span of 16 feet. Timber crib abutments, stone-filled. On the south end the approach 55 feet long, is a timber crib filled with gravel. The north approach is an earth fill. A strong

guard rail is placed at each side of bridge and fill. $600.00 was expended on the work.

Fifth Con. Bridge, Barrett Creek, Cameron.—Located over Barrett Creek on the 25th Con. of Cameron. A timber deck bridge on stone and concrete abutments, 7 feet in height. The deck is all cedar. The fill at the east end is 62 feet long and at the west end, 34 feet long. A strong guard rail at each side of bridge and fill. $808.00 was expended on the work.

Laplante Bridge, Con. 8, Bonfield.—Located over a creek on the 30th side line in the 8th Con. of Bonfield. A timber bridge with a clear span of 12 feet. The abutments are timber cribs, stone filled. The approaches at each end are 40 feet long and are walled with timber and filled with earth and stone. A strong guard rail is placed at each side of bridge and fill. Cost of work $599.14.

Le Clair Bridge, Con. 10, Ferris.—Located over a creek on the road between Cons. 10 and 11, Ferris. There are two bridges close together—one has a span of 16 feet and the other 8 feet. The abutments are of stone and concrete. The decks are of cedar timber. The fills at each end of both bridges are heavy. $499.74 was expended on the work.

North Creek Bridge, Con. 4, Widdifield.—Located over North Creek, Lot 7, Concession 4, Widdifield, near Widdifield Station. It is a concrete beam bridge, with a clear span of 20 feet. The abutments are of solid concrete and are 9′ 6″ in height to the floor level. They are supported on pile foundations. The 6″ floor slab is reinforced with $\frac{5}{8}$″ bars and is carried on 4 main beams. These beams are 12 inches wide and 18 inches deep, reinforced with 4 steel bars 1″ square. The railing is of moulded concrete posts. A heavy fill is placed at each end of bridge. J. W. Davis was foreman in charge. Cost, $2,164.00.

Moreau Bridge, 15 Sideline, Ferris.—Located over a creek on the 15 Concession of Ferris. The bridge has a clear span of 14 feet. Stone and concrete abutments. Cedar deck. The approaches, 150 feet on north end and 65 feet on south end, are filled with earth and stone. Cost, $497.91.

Socker Creek Bridge.—Located over Socker Creek on the Ferris-Chisholm townline. The bridge has a clear span of 12 feet stone and concrete abutments, 9 feet high. Cedar deck. The approaches, 300 feet on the east end, and 600 feet on the west end, are built up of earth and stone. The creek bed was cleared at this point, and the stone removed was used in the approach fills. Total cost, $495.10.

Parry Sound District Bridges.

Commanda Bridge, Nipissing Road.—Located over Commanda Creek on the Nipissing Road, near the west boundary of Gurd. It is a concrete beam bridge, with a clear span of 32 feet. The concrete abutments are about 8 feet in height. The 6″ floor slab reinforced with $\frac{5}{8}$″ bars, is carried on four main concrete beams. These beams are 30″ deep and 14″ wide, reinforced with 6″ steel bars, 1″ square. The railing is of moulded concrete posts. Approaches are well graded. T. J. Paget was foreman in charge. Cost, $2,380.00.

Dufferin Creek Bridge, Spence.—Located over Dufferin Creek on the Nipissing road in the township of Spence. A concrete beam bridge with a clear span of 17 feet. Concrete abutments 9 feet high rest on pile foundations. The 6″ floor slab reinforced with ⅝″ bars, is carried on four main concrete beams, 12″ wide and 15″ deep. The beams are reinforced with four one-inch square twisted steel bars. The railing is of moulded concrete posts. Approaches are well graded. John Orr, Road Inspector, supervised the construction. Cost, $2,177.00.

McCartney Bridge, Armour.—Located over the Magnetawan River at Lot 7, on the road between Cons. 10 and 11 of Armour. It is a concrete beam bridge with a clear span of 30 feet. The abutments of mass concrete are 10 feet in height, resting on solid rock. The floor slab is 6″ thick reinforced with ⅝″ bars and is carried on four main concrete beams. The beams are 12″ wide and 30″ deep, reinforced with five one-inch square twisted steel bars. The railing is of moulded concrete posts. Approaches are well graded. T. J. Paget was foreman in charge. Total cost, $2,192.00. The township of Armour contributed $600.00 toward the cost of the bridge, leaving the cost to the department of $1,592.00.

Rainy Lake Bridge.—Located over a creek at Rainy Lake, Lot 14, Con. 1, Shawanaga. It is a timber bridge, with a clear span of 16 feet, cedar crib abutments, stone filled. Stringers are 10″ pine and cedar flatted. Floor is of 6″ flatted cedar. Approaches are built up of stone and top-dressed with gravel. Cost of bridge, $203.25.

Shawanaga Bridge, Con. 2, Burpee.—Located over Shawanaga Creek at Lot 10. A timber bridge with a clear span of 15 feet. Cedar crib abutments, stone filled. Deck flatted cedar. Approaches stone filled. Cost of bridge, $433.75.

Third Line Bridge, South River.—A steel bridge on concrete abutments, located over South River at Lot 28 on the road between Cons. 2 and 3 in Himsworth. The steel span is 70 feet long, "C to C" of bearings, with roadway 14 feet in clear width. The abutments are of mass concrete, 16 feet in height to floor level, 6 feet wide at the base. The abutments are carried on heavy pile foundations, 35 piles being placed under each. A 6″ concrete floor slab is placed on the bridge. The grading of approaches was left for the road gang. The steel span was supplied by the Hamilton Bridge Co. at a contract price of $2,325.00. P. R. Switzer was foreman in charge. Total cost, $4,486.00.

Thirteenth Line Bridge, South River.—Located over South River at Lot 22 on the road between Cons. 12 and 13 of Himsworth about three miles west of Powassan. This is a concrete arch with a clear span of 66 feet at the spring of the arch ribs. The arch has a clear height of 12 feet and the deck is carried on two arched ribs. The ribs are 18″ thick, heavily reinforced with 1″ bars. Parapet walls extend 3′ 6″ above the floor level. The rib and wall have a depth of 6′ at the centre of the arch. The top railing of wall is 12″ x 12″ in size, reinforced with four ¾″ square twisted bars. Stirrups of ⅝″ bars are placed at 24″ centres, extending from the bars in the bottom of arch rib to bars in the top rail.

The floor system consists of two floor beams between the arch ribs, at 23 feet centres. These floor beams are 15″ wide and 24″ deep, reinforced with 1″ bars. Two longitudinal beams 12″ wide and 20″ deep, tied into the abutments and floor beams carry a 6″ floor slab, reinforced with ⅝″ bars. The abutments and wing walls are of mass concrete. The wings extend in line with arch ribs to the rock wall of the valley.

The approaches were levelled off by blasting and the rock used in filling in the ravine. C. R. Dolmage was foreman in charge. The total cost of the bridge was $7,675.00.

Trout Creek Bridge.—Located over Trout Creek on the Muskoka Road in the village of Trout Creek. It is a concrete trestle with an overall length of 72 feet and a clear width of 16 feet. It has a centre span of 27 feet with an approach span of 20 feet at each end. Four bents of concrete piles carry the floor. Owing to the height of the floor above the bottom of the creek, seven piles are used in each of the two centre bents. Four piles are used in the shore bents. The piles in the centre bents are 30 feet long, 8″ square at point and 14″ square at the head. Each pile is reinforced with four ¾″ bars, which are wound with No. 7 wire. The reinforcing projects 12″ beyond head of pile. A concrete cap is built up from the head of piles. Four main floor beams carry the 6″ floor slab. On the centre span the floor beams are 12″ wide and 24″ deep, reinforced with six 1″ square twisted bars. For the 20 foot spans the beams are 12″ wide and 18″ deep, reinforced with four 1″ bars. The railing is of moulded concrete posts with top rail supported on main posts 12″ square, placed at 9 foot centres. A stone fill is placed at each end of bridge and is allowed to fall to a natural slope around the piles. The approaches are well graded. P. R. Switzer was foreman in charge. Total cost, $5,439.74.

White Oak Bridge, Humphrey.—Located over White Oak Creek at Lot 77, Con. B., Parry Sound Road, township of Humphrey. It is a concrete beam bridge with a clear span of 27 feet on concrete abutments, 11′ 6″ in height to the floor level. The abutments rest on pile foundations. A 6″ floor slab reinforced with ⅝″ bars is carried on four main girder beams 14″ wide and 30″ deep. Each beam is reinforced with seven 1″ square twisted bars. The railing is of moulded concrete posts. A heavy fill was placed at each end of the bridge. T. J. Paget was foreman in charge. Heavy transportation charges and an isolated location made the cost unusually heavy. Total cost, $3,586.00.

Muskoka District Bridges.

Boyne Creek Bridge, Dwight.—Located over Boyne Creek on the north shore of the Lake of Bays in the township of Franklin, a short distance west of Dwight. This is a timber bridge on timber abutments. The deck of the bridge was raised 12″ to allow the passage of logs. An entirely new structure was built. The approaches were built up of stone. The roadway for about 400 feet west of the bridge had been cut away by the action of the water in the lake. A solid wall of stone 4 feet wide was placed here and the road widened to standard width. $944.00 was expended on the work.

Echo Creek Bridge, Baysville-Dorset Road.—Located over Echo Creek on the Baysville-Dorset Road at Lot 1 in the township of McLean. It is a

concrete bridge with a clear span of 12 feet. The abutments are concrete, 9 feet in height to floor level. The deck is a 12" slab, reinforced with ⅝" bars; railing of concrete posts. The approaches are well graded. Cost, $1,161.00.

East Creek Bridge, Oakley.—Located over East Creek at Lot 10, Con. 5, Oakley. A timber bridge with a clear span of 14 feet. Built entirely of cedar. Approaches filled with stone and top dressed with gravel. Cost, $231.13.

Fox Lake Bridge.—Located over Buck River at Lot 27, Con. 9, Stisted. A timber bridge 79 feet long over all, the bridge has a centre span of 40 feet, with a queen truss support. Approach spans of 12 feet are built at each end and the centre piers are 7 feet wide. They are built 10 feet high. The decayed timbers on the top of piers were removed and replaced with new timbers. An entirely new deck was put on. Strong guard rails were placed on each side of bridge and fill. The approaches were properly graded. Cost, $866.40.

Fifteenth Side Line Bridge, Stisted.—Located over Black Creek at Lot 8, on the 15th side line of Stisted. A timber bridge with a clear span of 15 feet. Cedar crib abutments, filled with stone. Stringers five lines of 10" flatted tamarac flooring 6" flatted cedar. A strong guard rail is placed on each side of bridge and fill. Approaches are properly graded. Cost, $186.00.

Gordon's Bridge, Trout Creek, Ridout.—Located over Trout Creek on the Baysville-Dorset Road in the township of Ridout. It is a concrete bridge with a clear span of 12 feet built after the same plan as the Echo Creek bridge, before described. Cost, $926.66.

Glass Mill Bridge, Monck.—Located over a creek at Lot 27, Con. 12, Monck. A concrete beam bridge, with a clear span of 20 feet. The concrete abutments are 9' 6" in height to the floor level. A 6" floor slab is carried on 4 main beams 12" wide and 18" deep, each reinforced with 4 bars of 1" square twisted steel. The railing is of concrete posts. Approaches properly graded. The concrete abutments rest on pile foundations. Total cost, $1,792.00.

Ryde-Draper Bridge.—Located over a creek at Lot 14, on the townline between Ryde and Draper. It is a wooden bridge, with a clear span of 15'. Cedar crib abutments carry a deck of flatted stringers and flatted flooring. The approaches are properly graded. A strong guard rail is placed on each side of bridge and fill. Cost, $205.50.

Skeleton River Bridge, Parry Sound Road, Watt.—Located over Skeleton River on the Parry Sound Road, Lot 22, Con. 13, Watt. In order to straighten the road, the bridge was moved east about ¼ of a mile. The new site requires abutments about 16' high. The bottom is soft, necessitating pile foundations for the abutments. The bridge is a concrete structure with a clear span of 25 feet. The 6-inch floor slab is supported by 4 main concrete beams. The beams are 12" wide and 24" deep, reinforced with 4 bars 1" square twisted steel. Railing is of standard moulded concrete posts. The grading of approaches was done by the Roads Department. The cost of the bridge was $2,478.75

All the bridges of the Muskoka District were constructed under the direction of Wm. Lowe, Foreman Public Works.

Simcoe County Bridges.

Hog Creek Bridge, 5th Con., Tay.—Located over Hog Creek at Lot 7, on the road in front of the 5th Con. of Tay. It is a concrete beam bridge with concrete pile abutments. It has a clear span of 20 feet. Each end of the bridge is supported on 4 concrete piles 18 feet long. The piles are 8" square at the lower end and 14" square at the head. Each is reinforced with four ¾" square twisted bars, with spiral winding of No. 7 wire. The reinforcing bars project 12" above the head of the pile. Reinforced caps are built up from the piles to the floor. Four main floor beams carry a 6" floor slab. The beams are built into the caps directly over the piles. The beams are 12" wide and 18" deep, each reinforced with four 1" square twisted bars. The railing is our standard moulded concrete posts. At each end an excavation was made below the bottom of the stream. A fill of stone was placed at each end. The fill falls to a natural slope around the piles making a durable and secure abutment. Cost of bridge, $1,650.00.

Marl Creek Bridge, Vespra.—Located over Marl Creek at Lot 2 on the road in front of Con. 11 of Vespra. A standard concrete beam bridge with a clear span of 25 feet concrete abutments 13 feet in height to floor level a built on a skew to line in with the stream. Pile foundations support the abutments. A heavy fill is placed at each end. Cost, $1,921.61.

North River Bridge, 3rd Line, Matchedash.—Located over North River on the road in front of Con. 3 at Lot 5, Matchedash. It is a concrete trestle with an overall length of 76 feet. The centre span is 30 feet clear and the end spans are 20 feet each. The deck is supported by 4 bents of piles. The two middle bents have 5 piles in each and the end bents 4 piles in each. The extra pile in the centre bent is merely a guard to protect the supporting pile on the upstream and from damage from ice and logs. The deck is of standard beams, floor and post railing all heavily reinforced; stone fills, properly bedded below the bottom of the stream are placed at each end to hold the approach fills. Total cost, $3,748.00. A steel bridge with a similar water way could not be constructed at this place for less than $6,000.00.

Silver Creek Bridge, Orillia Townline.—Located over Silver Creek on the townline between the township of North and South Orillia. It is a standard concrete beam bridge with a clear span of 17 feet. The abutments are 12 feet in height to the floor level. The approaches are well graded; the concrete work was done during the winter. Cost of work, $1,966.00.

Third Line Bridge, Matchedash.—Located over a creek at Lot 6 on the 3rd Con. road of Matchedash. A concrete beam bridge with a clear span of 20 feet supported on concrete piles. Each end is filled with stone well bedded below the bottom of the stream. Cost, $1,317.00.

Oro and Tecumseh Bridges.—In the spring of 1921, a number of important highway bridges were carried away by an unusual flood. The work of replacing all these bridges was a heavy burden on the municipalities. The matter was reported to the Government and on investigation it was decided that the Department of Public Works should undertake the renewal of a number

of the bridges, the townships undertaking to supply all the gravel required and to do all the necessary team work. Four bridges were built by the Department.

Fourth Line Bridge.—Located over a creek on the road in front of the 4th Con. of Tecumseh. A standard concrete beam bridge with a clear span of 17 feet. The township furnished the reinforcing steel for this bridge.

Newton Bridge.—Located over a creek at Lot 24 on the road in front of the 10th Con. of Tecumseh. A standard concrete beam bridge with a clear span of 35 feet. The abutments are 18′ 6″ in height to the floor level.

Ninth Concession Bridge.—Located over a creek at Lot 21 on the road in front of the 9th Con. of Tecumseh. A standard concrete beam bridge with a clear span of 35 feet. The abutments are 14′ 6″ in height to the floor level.

Willow Creek Bridge, Oro.—Located over Willow Creek at Lot 19 on the road in front of the 3rd Con. of Oro. A standard concrete beam bridge with a clear span of 20 feet. The abutments are 11′ 6″ in height to the floor level. The approaches are well graded. The four bridges in Oro and Tecumseh were constructed at a cost of $7,981.66 to the Department of Public Works. All the bridges in Simcoe County were constructed under the direction of Amos Train, Public Works Foreman.

Grey County Bridges.

Indian River Bridge, Keppel.—Located over the Indian River at Lot 34 on the road in front of Concession 18, Keppel. A standard concrete beam bridge, with a clear span of 25 feet. The abutments are 7 feet in height to the floor level. Long fills were placed at each end of the road. A concrete box culvert was also constructed in the vicinity of the bridge. Total cost, $2,051.70. S. Cole was foreman in charge.

Walter's Falls Bridge.—Located over a branch of the Bighead River at Walter's Falls on Lot 2, Con. 12, Holland. A concrete arch bridge with a width of 12 feet and a height of 10 feet, inside measurement. The length at the top of the arch is 56 feet. The side walls are 3 feet wide at the base and 2′ 6″ at the spring line. The arching is 15″ in depth at the key. It is reinforced throughout with ⅝″ square twisted bars. Heavy wing walls are placed at 3 corners to hold the fill. A grist mill wall protects the fourth corner. The roadway provided is 22 feet wide. A very heavy fill was required to provide a proper roadway, as the fill extends 16 feet above the top of the arch, or 27 feet above the bottom of the stream. The work was completed in a very satisfactory manner. Total cost is $4,072.00. S. Cole was foreman in charge.

North Bruce Bridges.

Sauble Bridge, Con. 12, Amabel.—Located over the Sauble River on the sideroad between lots 32 and 33 in the Lake Shore range of lots. It is a concrete arch bridge, with a clear span of 66 feet between footings. The roadway is 14 feet in clear width. The arch rings have a clear height of 12 feet above the spring line. The construction is fully described in the report on the Thir-

teenth Concession Bridge in the Parry Sound District. Sam Cole was foreman in charge. Total cost, $6,780.00.

Sixth Line Bridge, Sauble River.—Located over the Sauble River at Lot 6 on the Sixth Line of Amabel. A steel bridge on concrete abutments. The steel span is 71 feet long "C to C" with a 14 foot clear roadway. The abutments are 18 feet in height to the floor level and 7 feet in width at the base. They are provided with wing walls 14 feet in length at each corner. The steel span including steel floor joist was supplied by the Dominion Bridge Co. at a cost of $1,990.00. All the work, including the erection and painting of the steel, was done under the direction of Sam Cole, Public Works Foreman. Total cost of bridge was $5,555.00.

Victoria and Haliburton

Beech Lake Bridge, situated on Lot 16, Con. 3 of Stanhope, between Beech and Boskung Lakes. It is a timber bridge 131 feet long. The centre truss span, 30 feet long, is supported on framed bents that stand on crib foundations. Three spans of 16 feet each are placed at each end of the centre span. These spans are supported on framed bents resting on mud sills. Very little grading was required. P. R. Switzer was foreman in charge. Cost, $1,976.26.

Bear Lake Bridge, Glamorgan.—Situated at Lot 30, Con. 2, Glamorgan. A timber bridge 35 feet long, with a clear span of 25 feet. The outside stringers are two lines of 10" x 12" timbers bolted together at 6 foot spaces by ¾" bolts. A 10" x 12" needle beam is placed under the floor stringers at the centre. The deck is supported on timber crib abutments stone filled. A heavy fill was placed at each end of the bridge. The work was done under the direction of Jos. Alsop, Reeve of the Township, under a plan prepared by this Department. Total cost, $510.57.

Furnace Falls Bridge.—Situated over Burnt River at Lots 17 and 18, Con. 1, Snowdon. A concrete beam bridge with a clear span of 40 feet and an approach span of 15 feet. The abutments are solid concrete from 14 to 16 feet in height to the floor level. The outside beams with the railing act as girders, 6 feet in depth. The two centre beams 12" in depth are supported by an 18" floor beam, between the main girders. In the approach span the floor beams are 15" deep and 12" wide. The deck is well reinforced with square twisted bars. P. R. Switzer was foreman in charge. Total cost, $3,606.50.

North Hastings Bridges.

Jenkins Creek Bridge.—Located at Lot 6, Con. 12, Monteagle. A timber bridge with a 20 foot clear span. The abutments are 14 feet. The bridge is built entirely with cedar timber. The approaches are well graded with stone and gravel. Strong guard rails are placed at each side of bridge and fill. Cost, $497.03.

Mullett Creek and Bradley Lake Bridges.—These bridges were reconstructed and shortened to 20 feet. The approaches were graded. Cost, $587.52.

Papineau Creek Bridge.—Located at Lot 3, Con. 6, McClure. It has a 20 foot span. Abutments are cedar timber filled with stone. Approaches well graded. Cost, $511.75.

Storring Bridge, Elzevir.—Located over the Scootamata River at Lot 6, Con. 9, of Elzevir. It is a concrete beam bridge with a clear span of 35 feet. The abutments are 12 feet in height to the floor level. The structure is well reinforced with square twisted bars. The bridge was constructed by the County bridge gang under plans prepared in this Department. Walter Wiggins directed the work. Total cost, $2,786.07.

Swaynes Bridge.—Located over a creek at Lot 28, Con. 8, Limerick. A timber bridge with a 20 foot clear span. Crib abutments stone filled. The timber used was cedar. The approaches are well graded. Cost, $491.00.

Fraser Creek Bridge.—Located at Lot 21, Con. 4, Carlow. This is a small bridge with a very extensive fill. The fill, 360 feet long, is of stone, top-dressed with gravel. A strong guard rail is placed at each side of bridge and fill. Cost, $939.00.

York River Bridge, Carlow.—Located over the York River at Lot 20, Con. 10, Carlow. It is a timber structure 122 feet with a fill 34 feet long at each end. It has 3 spans of 30, 32 and 33 feet. The deck over each span is supported by a King truss. The timber in the old piers was removed to low-water level and rebuilt with new timber for a height of 10 feet. The piers are filled with stone. The noses of centre piers are protected with 8 inch angle-irons. Total cost, $2,488.53.

Waterhouse Creek Bridge.—Located at Lot 4, Con. 15, Faraday. It is a pile structure 30 feet long, with 3 pile bents. The timber is all cedar. Approaches well graded. Total cost, $400.00.

Walter Wiggins, Road Inspector, directed the work on all bridges in North Hastings.

Addington Bridges.

Beaver Lake and Salmon River Bridge, Sheffield.—Located over the Salmon River near Beaver Lake, Lot 12, Con. 7, Sheffield. It is a 60 foot steel span on concrete abutments. The south abutment consists of a stone-filled timber crib built up to low water level. A concrete pier rests on this crib. The pier is 7 feet in height to floor level. At the north end a long rock fill is placed.

The concrete bridge seat is built up on this rock fill from low-water level. The bridge has a concrete floor. The steel span was furnished by the Hamilton Bridge Company at a cost of $2,730.00. Total cost of bridge was $4,997.92.

Bolton Creek Bridge.—Located over Bolton Creek in Oso on the road between Clarendon and Zeland. A timber bridge with a clear span of 12 feet. The abutments are cedar cribs, stone filled. The approaches consist of stone fills resting on long timber foundations. The timber is 35 feet long and is buried in the bog. At the north end of the bridge a rock ledge was cut to ease the grade. The rock cut is 35 feet long, 12 feet wide and 4 feet in depth. The approaches are well gravelled 100 feet in length at each end. Cost, $798.00.

Love Mill Bridge, Canonto.—Located over the Clyde River at the Head of Love's Mill Pond on the Ompah-Folger Road. It is a concrete bridge with a cover of concrete on steel beams. The bridge has a clear span of 14 feet. On the west end the fill is 63 feet long and 8 feet in height. The hill adjoining was cut down and graded over a length of 150 feet. On the east end, the hill was cut from 2 to 5 feet over a length of 120 feet.

Eagle Creek Bridge.—Located over Eagle Creek at Lot 26, Con. 1, Hinchinbrooke. This is a concrete bridge with a clear span of 11 feet. The abutments are 9 feet in height. The floor is a concrete slab well reinforced. A substantial guard rail is placed at each side of bridge. The approaches are well graded and gravelled. Cost, $459.54.

Clyde River Bridge, Trout Creek, Canonto.—Located on a new road near the Lawrence Mill. It has a clear span of 12 feet. Stone abutments 6 feet high. The floor is of flatted cedar. Approaches well graded and gravelled. Cost, $800.00.

All bridges in Addington were constructed under the direction of W. W. Pringle, Road Inspector for the district.

Renfrew District Bridges.

Brennan Creek Bridge.—Located over Brennan Creek, Lot 16, Con. "A", Hagarty. A timber bridge with a clear span of 20 feet. Cedar crib abutments with cedar deck with railing. Approaches about 25 feet long at each end, 8 feet in height, filled with stone and gravelled. Cost, $487.00.

Enos Creek Bridge.—Located near boundary of Raglan and Lyndock on the Madawaska Road. It is a timber bridge with a span of 28 feet. The abutments are stone-filled cribs, 7 feet in height. The approaches are well graded and gravelled. Cost, $500.00.

Killaloe Village Bridge.—Situated over Brennan Creek in the village of Killaloe. It is concrete, with a clear span of 30 feet. The roadway is 18 feet in clear width. The abutments are 13 feet in height to floor level. The 8″ floor slab is carried on 4 main beams. The beams are 12 inches wide and 36″ in depth, reinforced with six 1″ square twisted bars. The railing is of standard moulded posts. The approaches are well graded. J. W. Davis was foreman in charge. Total cost, $2,141.00.

Little Madawaska Bridge.—Located over a creek at Lot 190, N.B.R., in the township of Sherwood. A timber bridge with two 16 foot spans. The cedar deck is supported on 3 crib piers. Approaches well graded. Cost, $399.80.

Quadville Bridge.—Located in the village of Quadville in the township of Lyndock. A timber bridge with a centre span of 30 feet and 2 short end spans. Timber crib abutments support the ends and the centre truss span is supported on frame bents of 10″ x 10″ timbers, 4 posts to each bent. The bridge has been raised 2½ feet above the former height. The approaches are well graded and strong guard rails placed at each side of bridge and fill. Cost, $1,220.00.

Smeltzer Creek Bridge.—Located over the Smeltzer Creek at Lot 24, Con. 19, Raglan. A timber bridge with a 30 foot span. Five new cedar stringers were put on and a new cover of 6″ flatted cedar. A fill 30 feet long and 6 feet deep was put in and a strong guard rail placed at each side of bridge and fill. Cost, $394.00.

Silver Creek Bridge.—Located over Silver Lake Creek in South Algoma. A timber bridge with a clear span of 20 feet. The abutments are cedar crib piers filled with stone. Five lines of stringers carry a 3″ cedar plank floor. The approaches are well graded. Cost, $502.00.

Varin Bridge, Griffith.—A timber bridge with 3 spans of 25 feet each. The deck is supported on timber crib piers 10 feet in height. The approaches are well graded. Part of the timber used was taken from the old Griffith Bridge. The balance of timber used was supplied free of cost. Expenditure, $399.00.

REPAIRING AND RECONSTRUCTION OF BRIDGES AND OTHER PUBLIC WORKS FROM THE MAINTENANCE FUND.

Rainy River District.

Bergland Road Bridges.—Three bridges 45 feet long were recovered with 3″ plank. The Bergland Bridge was furnished with a new Queen truss span 40 feet in length. $284.40 was expended on these bridges.

Grassey River Bridge, McCrosson.—This is a long timber bridge at the north end of the Bergland Road. An entire new deck was placed on the bridge. Cost, $423.44

Mather Bridge, 8 and 9, Con. 1.—A new deck was placed on the bridge and the approaches regraded.

Morley Bridge, between Secs. 34 and 35.—A new deck was placed on the bridge and the washed-out approaches regraded.

Section 13 Bridge, Dobie.—A new timber bridge with a 20 feet span constructed to replace a bridge carried away by the flood in the spring. Cost, $431.28.

Kenora District Bridges.

Anderson Road Bridges.—Two bridges on the Anderson Road were recovered.

Keewatin Town Bridge.—The long bridge over the bay between the town of Keewatin and the C.P.R. station was overhauled. The deck was practically renewed. Cost, $985.93.

Pigeon Bridge, Lot 7, Con. 1, Zealand.—This bridge is 112 feet long and 15 feet in height. The structure was generally repaired, all defective timber removed and replaced. New bracing was put on and a new cover and railing.

Nugget Creek Bridge, Lot 6, Con. 1, Zealand.—Bridge is 272 feet long. All defective plank was replaced in the floor. New braces put on.

Thunder Bay Bridges.

Marks Bridge, Con. 3.—This bridge was furnished with a new cover and the approaches properly graded. Cost, $189.36.

Pitch Creek Bridge, Con. 3, O'Connor.—A new timber bridge with a span of 16 feet. Pile abutments. Cost, $356.13.

Sunshine Bridge, Dawson Road.—One of the bents of the bridge was straightened. One of the piers, that had been undermined, was put in place and stoned to prevent further scour, and the approaches were graded. Cost, $100.00.

Whitewood Creek Bridge, Con. 4, O'Connor.—A new timber bridge with an 18′ span. Pile piers. Cost, $406.70.

Soo District Bridges.

Goulais Bridge, Fenwick.—The centre pier, which was damaged by the ice, was replanked and the steel painted.

Goulais Bridge, Van Horne.—The centre pier of this bridge was badly damaged by the heavy ice floes. A few broken piles were replaced and the crib timber raised to high-water level. A steel plate nose is to be placed on this bridge, as the timber cannot withstand the jarring from the ice floes.

Sudbury District Bridges.

Morgan Vermilion Bridge.—The west end of the bridge was washed out. A new frame bent of 10″ x 10″ timbers was placed to carry the deck, and the washout filled with rock.

Vermilion Bridge, Balfour.—Work here consisted of filling west end with rock. At the east end, a rock fill 40 feet long and five feet high was placed to prevent the water crossing and carrying away the grade. The banks are of light sand, and rock facing is the only way to prevent erosion.

Algoma District Bridges.

Alma Creek Bridge, Lot 5, Con. 8, Patton.—Repairs consist of new timbers in west abutment. Three new stringers. A new floor of flatted cedar 6″ thick. Also a new railing. Cost, $153.76.

Dausey Bridge, Lot 5, Con. 4, Cobden.—Work consisted of a fill of earth and rock at each end of bridge. At the south end the fill is 12 feet long and 10 feet high. At the north end, the fill is 10 feet long and 10 feet high. Both fills are top-dressed with gravel. Cost, $198.75.

Graham Bridge, on Little Serpent, Sec. 18, Victoria.—This bridge is 148 feet long. Repairs consisted of new 10″ x 12″ pine stringers on two spans

of the bridge. Fifty-three feet in length of the floor was renewed with pine plank and the balance of floor repaired. Cost, $286.96.

Galbraith Bridge, Lot 2, Con. 4, over the east branch of the Thessalon River.—This bridge is 60 feet long. Repairs consisted of a new floor of 3″ hemlock plank. Five new cedar stringers on the west span and one new stringer on the centre span. A new railing throughout. Cost, $147.26.

Haines Bridge, Lot 11, Con. 4, Aberdeen.—A new timber bridge with a span of 12 feet. Cedar pile abutments, stringers and floor flatted cedar. Strong guard rails in place. The new bridge is 4 feet higher than the old one and the approaches are properly graded to the new elevation. Cost, $386.70.

La Cloche Bridge, Lots 8 and 9, Con. 1, May.—This bridge is 150 feet long. Repairs consisted of two pine stringers 10″ x 12″ on the centre span and two pine stringers on the south span. A new set of stringers on the north span and a new floor of 3″ pine plank throughout. New guard rails were also put on.

Little Rapids Bridge.—The south end of the concrete pile bridge over the Little Thessalon near Little Rapids had been lowered about 18 inches at one side by an explosion of dynamite and the approach had been washed away by a flood. The repairs consisted of levelling up the floor and replacing the washed out fill with rock. 164 loads of stone were placed in the fill and top-dressed with gravel. Strong guard rails placed at each side of new fill. Cost, $562.11.

Little Serpent Bridge, Sec. 23, Shedden.—This bridge is 100 feet long. The centre span is 46 feet long. Repairs consisted of a new truss, 4 lines of 10″x12″ stringers, new needle beams. All defective parts of floor were removed and replaced with 5″ flatted cedar.

Mud Creek Bridge, Lot 3, Con. 6, Bright.—Repairs consisted of the approach to this bridge was only 9 feet wide. This approach was widened out to 22 feet. The rock fill on each side of old grade is 6 feet wide and 6 feet high, 34 feet long. At the north end of bridge a washout was filled with stone. Cost, $122.50.

Mississauga Bridge, Thompson.—This is a steel bridge 366 feet in length. The repairs consisted of an entire new floor of 3″ pine plank. All defective parts of wheel guard were removed and replaced with 4″ x 6″ timbers. Cost, $996.85.

Victoria Bridge, Sec. 34, on River Road between Massey and Walford.—This is a culvert 6 feet wide and 6 feet high. Cedar abutments 30 feet long at the bottom and 18 feet long at the top were put in on stone foundations. The top consists of 6″ flatted cedar. The fill at each side is 20 feet wide and 6 feet in height, extending back 30 feet from culvert. A strong guard rail is placed at each side of bridge and fill. Cost, $127.50.

Thessalon Bridge, Con. 2, Galbraith.—Over the east branch of the Thessalon River on the main road between Ophir and Dunns Valley. A new bridge with a span of 16 feet built entirely of cedar. Pile abutments with five lines of

10″ x 12″ flatted stringers. Flatted floor. A strong guard rail on each side of bridge and fill. The bridge was raised 4 feet above old level. A fill of earth and stone extends back 40 feet from the bridge. A retaining wall of stone 2½ feet thick and 9 feet high protects the fill. Cost, $193.83.

Thessalon Bridge, Lot 1, Con. 5, Aberdeen.—This bridge is 90 feet long. The repairs consisted of a new bent of piles at west end. 2 new piles in 2nd bent, one new pile in east end bent. New caps and new braces 4″ x 6″. A new truss of 10″ x 10″ timber. New 10″ x 12″ stringers on the west span. One new stringer 10″ x 12″, 50 feet long on centre span. An entire new floor of flatted cedar, with new guard rails. A new fill on stone on a brush layer bottom was placed in a washout at west end of bridge. Cost, $538.70.

Wings Bridge, located at Lot 5, Con. 3, Plummer.—A new timber bridge over the Thessalon River. Overall length 97 feet. It has a centre Queen truss span of 47′ 6″. Three approach spans are placed at south end and one span at the north end. The deck is carried on 8 pile bents. Truss timbers are 10″ x 12″, flatted stringers. 3″ plank floor. Approaches well graded.

Sturgeon Falls Bridges.

Deer Creek Bridge, Hugel-Kirk Townline.—Repairs consisted of replacing 3 timbers in the east end abutment and filling in a washout at the east end with rock.

Deer Creek Bridge, Con. 1, Ratter.—Locally known as the Mingay Bridge. The deck had been carried away by a flood. The old material was all recovered and replaced. It was securely bolted together and fastened securely to the abutments.

Deer Creek Bridge, Con. 2, Ratter.—Locally known as the Carmichael Bridge. A serious washout had occurred at each end of this bridge. Owing to difficulty of getting rock to fill in the holes, it was decided to extend the timber deck. Stringers 25 feet long were laid from the bridge to the solid bank at each end and a cover of 2″ plank was put on. The old deck was overhauled and properly repaired.

Deer Creek Bridge, at Lot 10, Hugel-Kirkpatrick Townline.—Locally known as Hickey Bridge. The old bridge was removed. A rock fill was placed at each end of the bridge up to water level. Timber cribs 8′ x 14′ and 8 feet high were built up from the rock fills. The span 20 feet wide was covered with 5 lines of flatted stringers with a floor of tamarac plank. The cribs were partly filled with rock and the approaches properly graded. A strong guard rail was placed at each side of bridge and fill.

Dunnett Bridge, Lot 5, Con. 4.—The old bridge here was 40 feet long. The new bridge has a span of 15 feet. Pile abutments back-sheeted with cedar. Five lines of flatted stringers. Floor 3″ pine plank. Guard rail of pine. Approaches filled with rock and gravel.

Grant Field Bridge.—Located on the boundary of Grant and Field. Repairs consisted of a new deck of 5 lines of flatted cedar stringers with a floor of 3″ tamarac plank. New railing, span 27 feet. Approaches properly graded.

Hagar Siding Bridge, Veuve River.—This bridge was badly damaged by the ice and a serious washout had been made at the south end of bridge. The deck was moved back into place. A new crib abutment 6 x 17 feet and 7 feet in height was built in the washout, 15 feet from the old abutment, providing a new waterway. The new pier is filled with rock and the deck extended to cover the new extension. Glance piers 6 x 16 feet and 6 feet high were placed upstream from the old piers to protect them from the ice doing further damage.

McCarthy Creek Bridge, Gibbons.—Repairs consisted of replacing two burnt piles and putting on an entire new deck, including the railing. The approaches were graded.

River Valley Bridge.—This is a new bridge, comprising 3 steel spans on timber pile piers. Last winter a large quantity of pulpwood was dumped into the river immediately below the bridge. When the spring flood came on this pulpwood did not move out and a very heavy log jam formed above the bridge, completely blocking the river. The result was a washout at each end of the bridge. At the south end, the washout was so deep that the pile pier under the steel dropped about two feet. New piles were driven at each side of the steel and also behind the old pier. The steel was then jacked up and a new seat put in place. The washout at each end was filled with rock and the bridge made as secure as before the damage was done.

Shea's Bridge, Lot 8, Con. 5, Dunnett.—Located over south branch of Veuve River. The old bridge consisted of a deck on timber cribs. The bottom is very soft and the centre cribs canted over, throwing the deck out of line and rendering the bridge unfit for service. The new bridge is a pile trestle of 5 spans. The end bents have 4 piles in each and the other bents have 5 piles in each. The old stringers were made use of and a new floor of 2" pine plank and a new railing were put on. The bridge was shortened 19 feet from the former length and the space was properly filled.

Smoky Creek Bridge, Grant.—Located at Lot 8, Con. 1. A new timber bridge with a clear span of 40 feet. A queen truss is carried on pile abutments. Truss timbers 10" x 12". Stringers, flatted timbers; floor, 3" pine plank. Approaches well graded.

Warren Bridge.—A steel bridge over the Veuve River. Repairs consisted of putting on a new floor of 3" pine and tamarac plank and replacing some defective stringers.

Veuve Bridge, Lot 9, Dunnett.—Located on the Trunk Road. The deck of this bridge was moved by high water and ice. Repairs consisted of replacing the deck and securely spiking it to the abutments.

Temiskaming Bridges.

Elk Lake Bridge.—The long bridge over the Narrows at the town of Elk Lake was provided with a new floor of 3" pine and tamarac plank. The railing was also overhauled and put in proper shape.

Harley-Kerns Townline Bridge.—Bridge reconstructed. Five spans of 15 feet each on framed bents. Caps and mudsills flatted cedar. Floor joist 8" flatted cedar; floor 2" plank. Railing and wheelguard in place.

Henwood Bridge, Lot 1, in 2nd Con.—Bridge across a ravine. Length 48 feet, height 8 feet. Pile posts, set in ground about 7 feet and well braced, carry a deck of flatted tamarac. Strong guard rails are placed on bridge.

Henwood Bridge, Lots 10 and 11, Con. 6.—One of the cribs had been undermined with the water and was badly out of shape. The crib was properly straightened and well drift-bolted. Ten loads of stone were placed at the front of the crib to protect the bottom from scour.

Hilliardton Scow Ferry.—A new scow ferry was placed on the White River at Hilliardton, to take care of the traffic until the new bridge is erected to take the place of the bridge carried away by the jams last spring.

Little Otter Bridge, Ingram-Hilliard Townline.—This bridge is 68 feet long and has a centre span of 36 feet and end spans of 16 feet each. The east end of truss rests on a pile pier and the west end on a crib pier well bedded and filled with stone. The stringers are flatted tamarac and floor of 3″ pine plank. A strong guard rail on each side of bridge.

Kerns Townline Steel Bridge.—One of the concrete supports of this bridge was undermined by the water. This support was properly underpinned and a stone breakwater constructed to divert the current into the proper channel.

Jean Baptiste Bridge, Lot 12, Con. 5, Henwood.—A new bridge 124 feet long. Centre span 48 feet, with two 16-foot spans at each end. The truss rests on double pile piers. Balance of bridge is a pile trestle. The centre piers are sheeted with 3″ plank. Floor joist 4″ x 12″ pine, 5 lines; cover 3″ plank. A strong guard rail is placed at each side of bridge. Approaches well graded. D. H. McIntosh was foreman in charge.

Wabis Bridge Timber Salvage.—A number of the Wabis bridges were carried away by the ice in the spring. A quantity of the bridge timber was saved from the river and lake. $315.00 was expended on this work.

Wabis Bridge, Lot 2, Harley-Dymond Boundary.—A new bridge 120 feet long. Centre span 60 feet. West end, one 16 foot span; east end, two 16-foot spans. The centre span rests on double pile piers. Balance of bridge is pile trestle. Truss timbers, corbels and caps are 10″ x 12″ timbers. Floor joist 5 lines of 5″ x 12″ pine. Strong guard rails at each side of bridge. The whole structure is well painted. The approaches are properly graded.

Barber Timber Camp.—In the early winter of 1921, D. H. McIntosh, Foreman, established a camp in the Township of Barber, on the Montreal River, for the purpose of taking out pine timber for bridge construction. During the winter, the logs were placed on the river. In the spring the logs were rafted down to Latchford and cut into plank and square timber, at a custom mill. The cut from the mill gave us a total of 325,000 feet B.M. In addition to the sawn timber, a quantity of pile timber was also brought down. The entire expenditure, including the cost of sawing at the mill, was $6,267.00, or about $19.00 per M. Similar timber could not be secured at a price less than $50.00 per M.

Parry Sound District Bridges.

Bella Lake Bridge.—A new timber bridge over the Narrows of Bella Lake, in the Township of Ferguson. The bridge has a clear span of 16 feet. $267.25 was expended on the work.

Bethune Bridge, 5 Sideline, Con. 10.—A new deck of tamarac and cedar was placed on this bridge. Cost $100.06.

Blackwater Bridge, Christie and McKellar, Lot 18, Con. 1.—A new timber bridge, crib abutments, stone filled. The deck, stringers and floor are of flatted cedar. Approaches well graded. Cost $246.36.

Burpee Bridge, Lots 1 and 2, Con. 2.—An old timber bridge 40 feet long, over a gully and a small stream, was replaced with a stone culvert and fill. The fill is of earth and stone and is about 6 feet in height. Cost $61.50.

Commanda Creek Bridge, Lot 35, Con. 10, Pringle.—This bridge has a clear span of 15 feet, with timber crib abutments. The top timbers of the cribs were removed and replaced with new timber. A new deck was put on. 10″ x 12″ stringers of pine, with a floor of 3″ hemlock plank. Guard rails were put on and the approaches were properly graded. Cost $401.25.

Commanda Bridge, Con. 7, Lount.—Span 14 feet clear, crib abutments; stringers 10″ x 12″ pine. Cover 6″ flatted cedar. Approaches properly graded. Cost $144.00.

Golden Valley Bridge, Lot 6, Con. 9, Pringle.—Bridge 56 feet long. A new cover of 3″ hemlock plank was put on. Also a new railing on each side of bridge. Cost $112.27.

Steidler Bridge, Lot 5, Con. 6, Hagerman.—Bridge is 120 feet long, with a 40-foot centre span and 4 spans of 20 feet each. Bridge is built on pile piers. Caps, truss, stringers and floor are all of flatted tamarac. Cost $958.89.

Wolf River Bridge, Con. 5, Hardy.—A new deck was placed on this bridge. The stringers are 10″ x 10″ oak and the floor is of flatted cedar. Cost $192.00.

Muskoka District Bridges.

High Bridge, Huntsville Locks.—The timbers in the approaches to the steel span on this bridge became badly rotted and the floor dangerous to traffic. A number of the main posts were replaced with new timbers. In the deck, many defective stringers were replaced and all defective parts of the floor renewed. The bridge is now in good condition. Cost $466.69.

Jo River Bridge.—This bridge is about 340 feet long, built entirely of hemlock. The substructure consists of framed bents on mudsills. Many of the posts have decayed at the water line. The stringers are all decayed and the floor is not fit for traffic. In order to keep the bridge open to traffic, two lines of new stringers were put in under the wheel track. The defective posts were strengthened with plank spiked above and below the defective parts.

Victoria and Haliburton Bridges.

Oxtongue River Bridge, McClintock, Lot 6, Con. 13.—This bridge is 110 feet long. The piers and abutments were removed down to water level and rebuilt with sound timber. A new deck of flatted stringers and cover of 2" plank was put on. Approaches graded. Cost $230.68.

Renfrew District Bridges.

Dam Lake Bridge, Lot 24, Con. 9, Radcliffe.—Two new stringers were put on and 65 feet of new covering of 6" flatted cedar. Cost $100.50.

Consta Creek Bridge, Lot 18, one mile east of the village of Dacre, in the Township of Brougham.—One of the piers had slipped from a stone foundation. This pier was rebuilt and a new deck with railing put on. Cost $299.00.

McMaster Creek Bridge, Lot 32, Con. 13, Raglan.—A new cover of flatted cedar, with new railing, was placed on this bridge, which is 65 feet long. Cost $185.00.

McMaster Creek Bridge, Con. 15.—On townline between Raglan and Lyndock. A new bridge with a span of 18 feet. Timber crib abutments, stone filled deck. Floors and stringers of flatted cedar. New guard rails. The fill at west end of bridge is from 2 to 6 feet high. Cost $392.50.

Stack Creek Bridge, Lot 10, Con. 2, Hagarty.—Bridge has a span of 10 feet. Timber crib piers. Floor and stringers all of flatted cedar. Approaches graded. Cost $200.00.

Whalen Creek Bridge, on the Brudenell-Killaloe Road.—Bridge has a clear span of 12 feet. Timber crib abutments, stone filled. Stringers and floor, flatted cedar. A fill of stone and gravel 30 feet long was put in. Cost $76.50.

White Lake Bridge, Lot 29, Con. 13, Raglan.—One of the piers was jacked up and underpinned. 36 feet in length was recovered with 6" flatted cedar. 60 feet of new railing placed at each side of bridge and fill. Cost $200.00.

REPAINTING STEEL BRIDGES.

At the outbreak of the war in the fall of 1914, we had a crew engaged in cleaning and repainting steel bridges that had been erected by the Public Works Department. This crew had started in Muskoka and had worked as far west as Kenora. The work of repainting was discontinued at that time and had not been resumed.

We had found through experience that the cleaning of the old bridges from paint, rust and scale, with scrapers and brushes, was very expensive. Hand painting was also slow and expensive. Investigation proved that the cleaning of the steel could be accomplished better, more quickly and cheaper

with a sand blast. We called for tenders for an outfit and purchased the one best suited to our need. This outfit comprises:

(1) No. 2 Zin-Ho Portable Air Compressor, 42 cubic feet air capacity, on trucks, with gasoline engine.

(2) No. 309 McLeod Bridge and Structural Steel Sand Blast Machine, mounted on two wheels, tank capacity 309 pounds.

(3) No. 485 McLeod Sprayer, on one wheel truck.

These machines were all supplied with the necessary hose and attachments and have given complete satisfaction. The cost of repainting has been greatly reduced. The price complete was $2,654.00. E. C. Dolmage is foreman in charge of repainting, and operates the outfit with the aid of two assistants.

List of Bridges Cleaned and Repainted during the Year 1921.
Work was Started on July 26th.

Sharp's Creek Bridge, Draper, 1 span, length 60 feet.
South Fall Bridge, Draper, 2 spans, length 90 feet.
Trethewey's Falls Bridge, Draper, 1 span, 60 feet long.
Black Bridge, South Branch, Draper, 2 spans, 120 feet in length.
Matthiasville Bridge, Draper, 1 span, 60 feet long.
Peterson Bridge, Oakley, 1 span, 60 feet long.
Thompson Bridge, Clear Lake, Oakley, 1 span, 60 feet long.
Gartersnake Bridge, Ryde, 1 span, 25 feet long.
Housey's Rapids Bridge, Ryde, 1 span, 80 feet long.
Bens Creek Bridge, Ryde, 1 span, 25 feet long.
Buck Creek Bridge, Ryde, 1 span, 45 feet long.
Doe Lake Bridge, Draper, 1 span, 25 feet long.
Kehoe's Bridge, Dalton, 1 span, 60 feet long.
Wasdale Bridge, Rama and Morrison, 2 spans, 140 feet in length.
Severn Bridge, Orillia and Morrison, 3 spans, length 225 feet.
High Bridge, Sparrow Lake Road, Morrison, 1 span, length 60 feet.
Koshee Bridge, Con. 6, Morrison, 5 spans, length 90 feet.
Big Koshee Bridge, Morrison, 1 span, length 35 feet.
Washago Bridge, North Orillia, 1 span, length 60 feet.
Carlyon Bridge, Con. 6, North Orillia, 1 span, length 70 feet.
Thorburn Bridge, Lot 4, Con. 4, North Orillia, 1 span, length 25 feet.
Marchmont Bridge, Con. 1, North Orillia, 1 span, length 40 feet.
Lovering Bridge, Con. 2, Matchedash, 1 span, length 60 feet.
Abbott's Bridge, Lot 4, Con. 3, Matchedash, 1 span, length 40 feet.
Bala Bridge, North Channel, Bala, 3 spans, length 150 feet.
Bala Bridge, South Channel, Bala, 5 spans, length 113 feet.
Oakley Bridge, Oakley and McLean, 2 spans, length 110 feet.
High Falls Bridge, Macaulay, 4 spans, length 180 feet.
Baysville Bridge, McLean, 2 spans, length 180 feet.

The entire expenditure in connection with the painting of above bridges, including wages, board, transportation, paint, etc., was $1,625.00, or practically $56.00 for each bridge.

DRAINAGE WORKS CONSTRUCTED BY THE PUBLIC WORKS DEPARTMENT.

Rainy River Drainage.

Blue Drain, Section 10.—This work is a continuation of last year's. It runs north across section 10 a distance of 252 rods to the drain between sections 10 and 15. The drain has an average depth of 3 feet. Top width 6 feet, and bottom width 3 feet.

Carpenter Drain, Lots 10 and 11, Con. 2.—This drain starts at the townline between Carpenter and Lash and runs east on the centre line of the 2nd Concession of Carpenter, across Lot 12 and part of Lot 11 to a creek. The drain is 296 rods long. Depth 2 to 4½ feet. Bottom width 4 to 5 feet. Top, 8 to 10 feet.

Devlin Drain, Section 33.—This is a short tap drain, 40 rods long, at south-west corner of Section 33. It drains the road west of Section 33. Later it will have to be extended to the Levallee River.

Dilke Drain, Section 34.—This is a tap drain for the Nelles-Dilke townline. It extends south from the townline through the east part of Section 34, Dilke, a distance of 100 rods and discharges into a ravine leading to Pine River. The drain has a bottom width of 3 feet. Depth from 2 to 3 feet with side slopes of 1 to 1.

Morley Drain, Section 34.—Drain commences at north-west corner of section 34, Morley, and runs east on north side of townline 46 rods. Thence south through section 34 a distance of 80 rods to a creek. On the townline, the drain is 2½ feet deep, with a mean width of 4½ feet. The tap drain is 3 feet deep with a mean width of 6 feet.

Nelles Drain, Section 6.—This is a tap drain for the road between sections 6 and 7, Nelles. It commences near the centre of section 6 and runs west on the road 62 rods, thence south into section 6, a distance of 179 rods. This drain has an average depth of 3 feet. Bottom width 3 and 4 feet. Top width 6 to 10 feet.

Richardson Drains, on Lots 6 and 7, Con. 1.—These drains are tap drains to drain the 2nd Con. Road of Richardson. The drain on Lot 6 commences near the centre of Lot 6 at the 2nd line and runs in a south-westerly course a distance of 394 rods to Pine River. The drain runs through flat land and an old creek bottom. It is from 2 to 3 feet deep and from 6 to 8 feet wide. The drain on Lot 7 commences at the 2nd line near the centre of the lot, runs south-east 120 rods to the 6th and 7th sideroad. Thence south along this road 140 rods to the Lot 6 drain. This drain follows a watercourse, is from 2 to 3 feet deep and from 6 to 8 feet wide.

This work was done under the direction of Frank Clement, Road Inspector. $4,762.00 was expended on the work.

Algoma District Drainage.

Plummer Additional, Lots 7 and 8, Con. 5.—This drain is on the south side of the 5th Con. road, north of Lot 8. It runs along the road 88 rods to the townline, jogs 15 rods to the north, then extends into Johnston 70 rods and discharges into a marsh. The drain is about 18 inches deep and from 3 to 4 feet wide.

Thompson Drain, Section 21.—This is a tap drain for the road through Section 21. It runs on the S.E. ¼ Section 21, from the road east a distance of 160 rods, discharging into a creek. Depth 18 inches, width 3 feet.

Day Drain, Lots 11 and 12, Con. 3.—This is a tap drain for part of the townline between Day and Thessalon. It commences at the townline near the line between Lots 11 and 12, and runs north-east through Lots 11 and 12 in Day, a distance of 160 rods, discharging into Little Mud Lake. It forms an outlet for the Section 19 drain, dug in 1919.

Galbraith Drain, Lots 6 and 7, Con. 3.—Two small tap drains for the 3rd line of Galbraith. The tap on Lot 6 is 29 rods long; the tap on Lot 7 is 38 rods long. These join near the line between 6 and 7. The common outlet extends 127 rods to the south, discharging into the east branch of the Thessalon River.

Plummer Drain, Lot 11, Con. 2.—A drain and tap drain for the road between Lots 10 and 11, Con. 2, Plummer. The drain runs north along the west side of the south half of Lot 10, a distance of 120 rods, thence west 80 rods into Caribeo Lake. The drain is from 2 to 3 feet deep, with an average width of 5 feet.

Thompson Drain, Sections 22 and 23.—This work consists of cleaning out a creek on Sections 22 and 23. 200 rods of the creek were ditched and cleaned. It drains the road between these sections.

Victoria Drain, Sections 23 and 26.—This work consisted of removing rock and stone from Black Creek, on Section 26, also cleaning out 40 rods of the creek on the same lot. Two short tap ditches were dug from the road south of Section 23 to the creek to drain the road ditches.

McDonald Drain, Section 29.—A tap drain to drain a section of the old Soo-Bruce Mines road. It runs north-east on Section 29 a distance of 90 rods, discharging into a creek on Section 20.

Striker Drain, Lots 9 and 10, Con. 1.—Ditches were dug on each side of the road through Lots 9 and 10, Con. 1, Striker, over a distance of 165 rods. The ditches are 18 inches deep and from 3 to 4 feet wide.

Galbraith Drain, Lot 4, Con. 5.—This work consisted of clearing out a creek through Lot 4 in the 5th Con. of Galbraith to drain the road between Lots 4 and 5; 120 rods of creek were cleaned 6 to 8 feet wide and a beaver dam was opened up and an old lumberman's dam was removed from the creek, freeing the water and providing an outlet for the road ditches.

$2,025.00 was spent on drainage work in Algoma. The work was done under the direction of Jas. Barkley, Road Inspector.

Manitoulin District Drainage.

Mindemoya River Drain.—The Mindemoya River channel was cleared of logs, brush and rubbish for a width of 45 feet from Lot 8 in the 6th Con. of Campbell to the Falls at Lot 3 in the 9th Con., a distance of 580 rods.

Campbell Drain, Lots 8, 9, 10 and 11 in Con. 13.—This work commenced at Lot 8 on the 13th Con. road and extended south and west along a watercourse, a distance of 250 rods. The work consisted of clearing and deepening the watercourse where necessary.

Assiginack Drain, Lot 29, Con. 8.—A tap drain for a section of the road between Lots 28 and 29. The drain is 80 rods long and runs in a south-easterly direction to an outlet at the 9th line.

Bidwell Drain, Con. 10.—A tap drain for the road between Lots 28 and 29 in the 10th Con. The work consisted of clearing and deepening a watercourse west from the side road a distance of 28 rods. The culvert across the side road was also cleaned out and repaired.

Burpee Drain, Lots 20 to 27, in the 5th, 6th and 7th Cons.—The old creek bed was well cleared of logs, brush and rubbish for a width of 25 feet over a distance of 400 rods, extending from Lot 20 in the 7th Con. to a lake on Lot 27 in the 5th Con. The bed of the creek was also ditched where necessary. The ditching extended over a distance of 110 rods.

Dawson Drain, Con. 11, Lot 31.—A tap drain to drain the 30th side road. It is a short drain 20 rods long, running north-east from the side road. It also provides needed drainage for parts of Lots 30 and 31 in the 11th Con.

Robinson Drain, on road between Cons. 7 and 8, in front of Lots 22 and 23.—The drain is on the north side of the road. It is 90 rods long. It is from 3 to 4 feet deep and from 5 to 6 feet in width. It provides good drainage for a bad section of road and the adjacent lands.

Sudbury District Drainage.

The following drains were opened up in the Sudbury District:

Balfour Township, drain on Lot 5, Con. 2, length 160 rods.
Balfour Township, drain on Lot 2, Con. 4, length 190 rods.
Balfour Township, drain on Lots 6, 7, 8, Con. 4, length 270 rods.
Balfour Township, drain on Lot 5, Con. 6, length 130 rods.
Balfour Township, drain on Lot 9, Con. 6, length 240 rods.
Balfour and Creighton, drain on Lot 4, Con. 6, length 320 rods.
Blezard, drain on Lot 5, Con. 5, length 206 rods.
Broder, drain on Lot 12, Con. 4, length 285 rods.
Broder, drain on Lots 4 and 5, Cons. 1 and 2, length 315 rods.
Capreol, drain on Lot 5, Con. 4, length 285 rods.
Dill, drain on Lot 9, Con. 3, length 70 rods.
Dill, drain on Lots 11 and 12, Con. 5, length 88 rods.
Lumsden, drain on Lots 5 and 6, Con. 1, length 108 rods.

The drainage work in the Sudbury District was done under the direction of Basile Ethier, Road Inspector.

Sturgeon Falls Drainage.

McPherson Drain, Lots 4 and 5, Con. 5.—This work consists of ditching a creek bed across Lots 4 and 5, in the 5th Con. The drain is about one mile long, depth 3 feet. Bottom width 2 feet; side slopes 1 to 1.

Muskanonge Creek Drain.—This work consists of clearing the creek and banks of logs, brush and rubbish, deepening rapids and cutting channels through gravel and sand bars. The work extends across Lots 7, 8 and 9, a distance of about 500 rods, in the Township of Casimir.

MacPherson Drain, Lots 6 and 7, Con. 3.—This work consisted of ditching a watercourse across the north parts of Lots 6 and 7 in the 3rd concession. The banks are well cleared. The drain is about one mile long, is 3 feet deep, with side slopes 1″ to 1″. The drain has a good natural outlet in a creek.

MacPherson Drain, Lots 6, 7, 8 and 9, Con. 6.—This is a tap drain for the main road running south through Lot 6 in MacPherson. It runs west near the middle line of the lots in the 6th, a distance of 500 rods to a creek. The drain has a bottom width of 4 feet, is from 3 to 3½ feet deep, with side slopes of 1″ to 1″. It drains a bad section of road and is of great benefit to the farms which it crosses.

Temiskaming District Drainage

Sutton Creek, Con. 1, Casey.—Continuing from last year, the course was cleared 20 feet wide for a distance of 75 rods. 60 rods of the drain started last year was deepened and widened. Forty-five rods of new drain were opened up. The drain is 3 feet deep and from 8 to 9 feet wide.

Casey Drain, at Judge.—This drain runs from the 2nd Con. road south on the centre of Lot 10, south to Burwash Creek. The right of way is cleared 15 feet wide to a ravine running to the creek, clearing course in ravine and ditching 60 rods in ravine. This work is to be extended in 1922.

Brethour-Hilliard Drain, Con. 5.—This drain runs on the 5th Con. road across Lot 1, Brethour, and Lot 12, Hilliard, with an outlet 35 rods north into Otter Creek. In Hilliard, the ditch is 2½ feet deep, and in Brethour the ditch is 2½ feet deep, and from 5 to 7 feet wide.

Brethour South Boundary Drain.—This drain is south of Lots 9 and 10. It was constructed over a distance of 166 rods and the right of way cleared an extra distance of 37 rods. The ditch is 3½ feet deep and from 6 to 9 feet wide. It is to be continued next season.

Harley Drain, Lot 2 in 5th.—This drain has been constructed over a distance of 120 rods and the right of way cleared an extra forty rods. The ditch is 3 feet deep and is from 8 to 9 feet wide.

The work in Temiskaming was done under the direction of W. E. Kerr, Public Works Foreman.

Nipissing District Drainage.

The following drains were opened up in the different townships in the District of Nipissing:

Bonfield Township, Lot 19, Con. 1, 54 rods.
Bonfield Township, Lot 30, Con. 2, 80 rods.
Bonfield Township, Lot 6, Con. 10, 40 rods.
Cameron Township, Lot 10, Con. 23, 60 rods.
Chisholm Township, Lot 18, Con. 17, 42 rods.
Chisholm Township, Lot 2, Con. 10, 105 rods.
Chisholm Township, Lot 7, Con. 11, 80 rods.
Chisholm Township, Lot 14, Con. 11, 55 rods.
Chisholm Township, Lot 8, Con. 17, 50 rods.
Chisholm Township, Lot 20, Con. 13, 41 rods.
Chisholm Township, Lot 6, Con. 17, 50 rods.
Chisholm Township, Lot 12, Con. 17 (rock), 60 feet.
Ferris Township, on 20 sideroad, Con. 1, 160 rods.
Ferris Township, Lots 22 and 23, Cons. 2 and 3, 90 rods.
Ferris Township, Lot 9, Con. 6, 50 rods.
Ferris Township, Lot 2, Con. 7, 50 rods.
Ferris Township, Lot 17, Con. 7, 25 rods.
Ferris Township, Lot 18, Con. 7, 110 rods.
Ferris Township, Lot 13, Con. 15, 40 rods.
Ferris Township, Lots 15 and 16, Con. 7, 80 rods.
Ferris Township, Lots 22 and 23, Con. 10, 42 rods.
Papineau Township, Lots 4 and 5, Con. 11, 93 rods.
Papineau Township, Lot 16, Con. 11, 50 rods.
Papineau Township, Lot 20, Con. 12, 40 rods.
Widdifield Township, Lot 1, Con. A, 60 rods.
Widdifield Township, Lot 14, Con. A., 50 rods.
Widdifield Township, Lot 15, Con. A., 100 rods.
Widdifield Township, Lot 18, Con. A, 150 rods.
Widdifield Township, Lot 14, Con. A, 35 rods.
Widdifield Township, Lot 17, Con. 1, 70 rods.
Widdifield Township, Lot 21, Con. 3, 60 rods.

The drainage work in Nipissing was done under the direction of P. Rochefort, Road Inspector.

Parry Sound Drainage.

Mills Drain, Con. 13.—A drain 100 rods long was opened up on Lots 13 and 14, Con. 13, Mills. The drain is 4 feet deep and from 8 to 10 feet wide. One-third of the work was supplied free of cost.

Armour Drain, Con. 12.—This drain runs across Lots 17, 18 and 19 in the 12th Con. of Armour. The depth is about 4 feet and the width from 6 to 9 feet. The work was done under the direction of John Orr, Road Inspector.

Muskoka District Drainage.

Ryde-Draper Townline Drain.—A badly drained section of road was relieved by the construction of 40 rods of drain 4 feet deep, on the townline at Lot 14.

Moon Chute Improvement.—A small channel east of the Rock Island at Moon Chute was widened to afford a better discharge for the Moon River during high water. This channel was widened to 30 feet down to low-water level.

McCully Drain, Medora.—A rock cut 36 feet long was made on Lot 33, Con. 2, Medora, to drain a section of the Bracebridge-Port Carling road.

Watt-Stephenson Townline Drain.—A badly drained section of this road was properly drained by opening up 200 rods of a creek on Lot 1, Con. 9, and also opening up 85 rods of a ditch on the townline.

East Simcoe Drainage.

North River Drainage.—A ledge of rock on Lot 3, Con. 4, Matchedash, was holding back water and causing the flooding of a large area of arable land. This ledge was blasted out for a length of 50 feet, 30 feet wide and 6 feet in depth, providing a good discharge for the penned-up water.

Willow Creek Drain, Vespra.—The work on Willow Creek was continued up from the point where the work stopped last fall. This season's work extends across Lots 10, 11, 12 and 13, a distance of about 4½ miles. The work consists of clearing the creek and banks of logs, brush and rubbish. The work already done has had a wonderful effect on the swamp. The creek is rapidly enlarging and the adjoining lands will soon be brought under cultivation.

Drainage in Grey and Bruce.

Indian River Work, Con. 18, Keppel.—A rock obstruction in the Indian River in Con. 18, Keppel, was blasted over a length of 900 feet. A channel 7 feet wide and 3 feet deep was constructed through the ledge, allowing the escape of water that formerly submerged the low lands above the ledge.

Amabel Drain, Mud Lake.—The outlet of Mud Lake in Amabel was cleared of logs, brush and rubbish over a length of 4½ miles. This work lowers the water of the lake and provides drainage for a large area of good lands. It also makes possible the proper drainage of roads in the vicinity.

Arran Lake Outlet.—This work consists of clearing out the creek, the outlet of Arran Lake, over a length of 2 miles. The creek was badly obstructed with willows, logs and rubbish. These were all removed, providing a clear channel 16 feet wide.

North-East Drain, Lots 28 and 29, Con. 18, Arran.—This work consists of opening up a drain 400 rods long. The drain averages 2½ feet in depth and 6 feet in width.

Lindsay Township Drain, Lot 6, Cons. 3 and 4.—This drain is 170 rods long, 2½ feet deep and 6 to 8 feet wide.

North Ontario District Drainage.

Rama Drain, 17 and 18, Con. "D."—Owing to wet weather, only 1,000 feet of this drain was completed, but the right of way has been cleared throughout the whole course.

Campbell Drain, Con. 4 and 5, Rama.—This work commences at the line between Lots 15 and 16, Con. 4., and runs west and north through Lots 16 and 17, Con. 5, and across the C.N.R., and across a portion of the Indian Reserve. The work consisted of cleaning out an old drain. All logs, brush and rubbish were removed. Where needed the sides were trimmed, and the bottom was deepened 6 inches from the C.N.R. track to the lower end of drain.

Rama Drain, 17 and 18, Con. 2.—This drain has been opened up from end to end, but owing to wet weather the work was not fully completed.

The work in North Ontario was done under the direction of Neil Hayes, Road Inspector.

North Hastings Drainage.

Madoc Drain, Lots 3, 4 and 5, Cons. 8 and 9.—This drain is to relieve a low section of the 9th Con. road, in front of Lot 5. The drain extends across Lots 5, 4 and 3, discharging into a creek. It is from 1½ to 3 feet deep. Bottom width, upper section 3 feet, lower section 5 feet. Side slopes 1 to 1.

Marmora Drain, Long Swamp.—This is a drain to drain the Long Swamp road in Marmora. The road ditch is 7,400 feet long and the outlet 700 feet long. Depth 1½ to 3 feet. Bottom width 3 feet. Side slopes 1 to 1.

Monteagle Drain, Con. 11.—This drain is to drain a low section of road at Lot 9. The drain is 700 feet long in front of Lot 9, Con. 11, with an outlet to the north 700 feet long. The road ditch has a bottom width of 3 feet with a general depth of 18 inches. The outlet ditch has a bottom width of 4 feet, depth varying from 1 to 3 feet. Side slopes 1 to 1. $1,950.27 was expended on the three drains, which were constructed under the direction of Walter Wiggins, Road Inspector.

Addington District Drainage.

Harlowe Road Drain, Kennebec.—This work is to drain a bad section on the Arden-Harlowe Road, at Lot 25 in the 7th Con. of Kennebec. The drain is about 100 rods long. It is from 2 to 3 feet deep, and from 6 to 8 feet wide.

Pickerel Creek Drain, Olden.—This work consisted of removing rock and boulders from a section of Pickerel Creek on Lot 4, Con. 3, in the Township of Olden. The obstruction to the creek caused the flooding of some 100 rods of the Babcock Road and also some 200 acres of valuable land. The drainage work in Addington was done under the direction of W. W. Pringle, Road Inspector.

I have the honour to be, Sir,

Your obedient servant,

A. J. Halford,

Engineer of Public Works.

Toronto, October 31st, 1921.

STATEMENTS

OF THE

ACCOUNTANT

OF

PUBLIC WORKS

Department of Public Works, Ontario

Toronto, March 6th, 1922.

Honourable F. C. Biggs,

Minister of Public Works and Highways.

Sir,—I have the honour to submit detailed statements of Civil Government and Maintenance, and Repairs Government Buildings; also Capital Expenditure on Provincial Public Buildings and Public Works during the Fiscal Year which ended on the 31st of October, 1921.

I have the honour to be,

Sir,

Your obedient servant,

Clotilde Kentleton,
Accountant Public Works.

STATEMENT OF EXPENDITURE, CIVIL GOVERNMENT, MAINTENANCE AND REPAIRS GOVERNMENT BUILDINGS, FOR YEAR ENDING, OCTOBER 31ST, 1921.

Name of Work.	Amount.	Amount.
CIVIL GOVERNMENT:		
Salaries	$50,545 22	
Contingencies	20,500 32	
Typewriters, Adding Machines, etc	579 30	
Fees, various Officials, etc	78 72	$71,703 56
MAINTENANCE AND REPAIRS, GOVERNMENT HOUSE:		
Salaries	3,566 65	
Assistant Gardeners, Firemen, etc. (including repairs to grounds)	12,685 41	
Water, Fuel, Light and Power	7,520 34	
Repairs and Contingencies	7,481 33	
Furniture and Furnishings	1,214 78	
Uniforms for Messengers	193 00	
Telephone Service	424 86	33,086 38
MAINTENANCE AND REPAIRS, PARLIAMENT BUILDINGS:		
Salaries	66,896 19	
Water and Fuel	41,121 75	
Electric Power, Light, Current and Gas	11,392 51	
Supplies, Tools, etc. for Engine Room	839 73	
Caretaker of Grounds and Maintenance of Grounds, Drives, Walks	5,815 10	
Repairs and Cleaning of Buildings	104,231 26	
Vault Fittings and Shelving	12,376 50	
Furniture and Furnishings	44,167 12	
Interior Alterations	2,945 28	
Flowers, Shrubs, Plants, etc	900 03	
Uniforms for Messengers, Attendants, etc	330 25	
Improvements in Heating Mains, East Wing	202 78	
Painting Outside and Inside Work	13,465 44	
Telephone Service	22,087 95	
Ground Rent No. 5 Queen's Park	250 00	
" " 15 " "	800 00	
" " 17 " "	800 00	
" " 42, 44, 46 Richmond St. W	5,248 35	
" " 47 Queen's Park	121 50	
Rental of Government Offices, Spadina Crescent	20,778 75	
Local Improvement Taxes, No. 15, 17, 47, Queens Park Drive to Commute	1,404 03	
Rental of McLean Building, University Avenue	6,671 00	
Fire Protection, including Clothing for Volunteer Fire Department	316 29	363,161 81
MAINTENANCE AND REPAIRS, OSGOODE HALL:		
Salaries	18,387 11	
Fuel, Light, Water and Power	12,171 33	
Furniture and Incidentals	3,099 77	
Uniforms for Messengers	188 55	
Telephone and Telegraph Service	3,392 00	
Grant, Telegraph and Telephone Service	175 00	
Fire Protection	99 47	
Cleaning of Building	5,419 24	42,932 47
MISCELLANEOUS:		
Salaries	28,104 27	
Arrears of Salary, 1920	416 00	
Contingencies	97	
Automobile Purchase, Repairs, Maintenance, Equipment and Service for all Departments of the Government	16,939 61	
Services, Travelling and other expenses	6,653 37	52,114 22

STATEMENT OF EXPENDITURE ON CAPITAL ACCOUNT FOR PUBLIC BUILDINGS, PUBLIC WORKS, DRAINAGE, ETC., FOR THE YEAR ENDING OCTOBER 31ST, 1921.

Name of Work.	Amount.	Amount.
PUBLIC BUILDINGS:		
Parliament Buildings:		
To provide Additional Accommodation		$196,182 98
Osgoode Hall:		
General Repairs and Alterations	$ 7,152 29	
Electric Wiring and Fixtures	71 12	
Painting Interior and Exterior	3,907 89	
Fittings for Vaults and Offices	5,295 00	
Fuel Oil Burning Equipment	757 25	17,183 55
Ontario Hospital, Brockville:		
Additions and Alterations		1,825 78
Ontario Hospital, Hamilton:		
Additions and Alterations	4,115 61	
Completion of Mortuary	3,920 80	
Auxiliary Centrifugal Pump at Queen Street Station	2,254 54	
Fire Alarm and Telephone System	262 25	
Electric Light, Rewiring, etc.	440 67	
Reconstruction of Orchard House	51,657 12	62,650 99
Ontario Hospital, Kingston:		
Additions and Alterations	3,041 83	
New Milk House, altering position of old barn, etc	1,909 60	
For Purchase of Additional Property and Improvement, etc.	4,612 50	
Solicitor's Fees and Disbursements, 1920	136 72	
Extension of Water Main, Water Tank and Tower	5,497 00	
Fire Alarm and Telephone System	870 61	
Renewal of Water Mains, etc	6,070 47	
Electric Light System, Renewal of Pole Line, etc	2,526 89	
Remodelling Dairy Barn	8,705 20	
Furniture and Furnishings for Nurses' Home	1,402 17	
Services for Consulting Engineer	70 17	34,843 16
Ontario Hospital, London:		
Additions and Alterations	3,460 88	
Water Supply	954 12	
Improvement in Heating and Boiler Plant	1,959 02	
Fire Hall	460 61	
Reconstruction of Barn destroyed by fire	7,847 60	
Balconies on present Buildings, and to complete Balconies, etc.	6,088 40	20,770 63
Ontario Hospital, Mimico:		
Additions and Alterations	4,803 16	
Improvements in Water Supply and Storage Tank	111 49	4,914 65
Ontario Hospital, Orillia:		
Additions and Alterations	2,255 77	
Extension and Renewal of Electric Light System	1,343 55	
Equipment, Fire Protection	1,200 00	
Improvements in Water Supply, etc.	1,629 64	
Fire Alarm and Telephone System	1,157 23	
Water Purification and Sewage Disposal	5,702 28	
Repairs and Improvements in Heating and Ventilating Main Building, etc.	5,591 90	18,880 37
Ontario Hospital, Penetanguishene:		
Additions and Alterations	1,604 88	
Remodelling and Additions to Existing Buildings	8,979 45	10,584 33
Ontario Hospital, Whitby:		
For Construction of Works and Buildings, etc.	.....	470,729 48
Ontario Hospital, Woodstock:		
Additions and Alterations	114 75	
Electric Wiring and Lighting Grounds	3,186 84	
Fir Alarm and Telephone System	475 75	3,777 34
Industrial Farm, Burwash:		
Construction of Works, etc.	90,680 94	
Purchase of Land, etc.	900 00	91,580 94
Normal and Model Schools, Toronto:		
Repairs, Alterations and Additions	7,104 29	
Concreting Court	550 00	
Repairs to Fence, etc.	221 65	
To provide for Remodelling	16,074 61	23,950 55

PUBLIC BUILDINGS.—*Continued*

Name of Work	Amount	Amount
Normal and Model Schools, Ottawa:		
Repairs and Incidentals	$ 251 44	
Remodelling and Repairing, etc	12,016 07	
Ash Hoist to Boiler House	770 98	
To pay City of Ottawa Taxes, 1919-20-21	203 56	13,242 05
Normal School, London:		
Repairs and Incidentals	618 76	
To pay City of London Taxes, Local Improvement 1920-21	1,554 85	2,173 61
Normal School, Hamilton:		
Repairs and Incidentals	1,123 48	
Painting Interior and Exterior, etc	18 35	
To pay City of Hamilton Arrears of Taxes, 27 Lamoreaux Street, 1918	24 30	
Renewal of Steam Pipe, etc	119 60	1,285 73
Normal School, Peterborough:		
Repairs and Incidentals	230 48	
Additional Shelving in Library	528 00	758 48
Normal School, Stratford:		
Repairs and Incidentals	1,888 64	
Painting Exterior and Interior	628 00	
Fire Protection	200 00	2,716 64
Normal School, North Bay:		
Repairs and Incidentals	1,218 29	
Fire Protection	475 38	1,693 67
Ontario School for the Deaf, Belleville:		
Additions and Alterations, Repairs and Incidentals	3,794 87	
Part Reconstruction of Main Building	103,743 60	
Shoe Shop Machinery	1,593 65	
Carpenter Shop Machinery	2,498 43	
To pay E. Giles, special services as Engineer	75 75	111,706 25
Ontario School for the Blind, Brantford:		
Repairs and Incidentals	1,151 82	
To provide for Fitting and Equipping Room for Teaching Domestic Science	170 80	
Concrete Walks	2,979 68	
Work on Grounds, including underbrushing and fencing	642 69	
To pay City of Brantford Local Improvement Taxes	932 65	
To pay Account for Repairs to Heating Plant	716 20	6,593 84
Training School, Sandwich:		
Repairs and Incidentals	108 18	
Local Improvement Taxes, Mill Street	1,345 44	
Improvement in Heating	558 28	2,011 90
Training School, Sturgeon Falls:		
To complete Building, Furniture Equipment and Improvement to Grounds	61,553 91	61,553 91
Northern Academy, Monteith:		
Fencing, Planting and Laying Out Grounds	864 42	
Improvements in Heating, etc	694 04	
To provide for erection of New Building and for Equipment, etc	115 24	1,673 70
Ontario Agricultural College, Guelph:		
Repairs	2,673 51	
Apiary Building	14,921 43	
Students' Residence	21,246 60	
New Veterinary College	33,959 78	
New Dairy Building	47,902 98	
New Boiler and Installation, etc	356 52	
Alterations to Main Building	13,270 46	134,331 28
Horticultural Experimental Station, Vinelands:		
Repairs	1,142 78	
Houses for Employees	10,432 26	
To complete Houses, etc	2,985 98	14,561 02
Ontario Veterinary College:		
Alterations, Additions and Repairs		671 41

PUBLIC BUILDINGS.—*Continued*

Name of Work	Amount	Amount
Algoma District:		
Repairs and Alterations to Court House	$ 780 85	
Furniture and Furnishings	260 77	
Court House, Sault Ste. Marie	144,727 92	
To pay Sault Ste. Marie Taxes, 1921	428 63	$146,198 17
Kenora District:		
Repairs and Alterations to Court House, etc	397 63	
Furnishings for District	6 60	
Improvement in Heating Land Titles Office	1,902 17	2,306 40
Manitoulin District:		
Repairs and Alterations to Court House	126 15	
Furniture and Furnishings for District	24 50	150 65
Muskoka District:		
General Repairs to Court House	768 69	
Furniture and Furnishings	6 75	775 44
Nipissing District:		
Repairs and Alterations to Court House	457 32	
Furniture and Furnishings	177 45	634 77
Parry Sound District:		
Repairs and Alterations to Court House	380 79	
Furniture and Furnishings	95 55	
Additions to Court House	1,778 50	2,254 84
Rainy River District:		
Repairs and Alterations to Court House	156 74	
Furniture and Furnishings	402 73	
Local Improvement Taxes, Fort Frances, 1920-21	174 21	733 68
Sudbury District:		
Repairs and Alterations to Court House	729 82	
Electric Light Service and Power	150 00	
Furniture and Furnishings	36 65	916 47
Temiskaming District:		
Repairs and Alterations to Court House	968 65	
Furniture and Furnishings	94 03	
Vault Fittings for Court House at Haileybury	422 50	
To pay Contract for Law Library Book-case and Partition	610 00	
Painting Court House and Registry Office	281 50	2,376 68
Thunder Bay District:		
Repairs and Alterations to Court House	579 62	
Furniture and Furnishings	64 75	
Improvement in Heating Court House and Gaol, Port Arthur	4,783 02	
New Court House, Port Arthur	1 45	
Improvement in Heating Registry Office, Port Arthur	526 96	5,955 80
Miscellaneous:		
Compensation for Workmen injured on Government Works	6,680 70	
Insurance	5,303 28	
Fish Hatchery, Port Arthur, House for Superintendent	366 54	
To pay City of London Local Improvement Taxes, Hygienic Building, 1919-20-21	423 80	12,774 32
TOTAL PUBLIC BUILDINGS		$1,487,922 46

PUBLIC WORKS:

Name of Work	Amount
Anderson Road Bridges (3)	$785 20
Antoine Creek Bridge, Con. 6, Mattawan	972 22
Assiginack Bridge	298 92
Astorville Bridge, Ferris	1,995 96
Barrie Island Bridge	1,137 45
Barlow Bridge, Con. 6, Armstrong	19 98
Bar River Bridge, to complete	2,181 59
Barrett Creek Bridge, Con. 4, Cameron	500 50
Bear Lake Bridge, Glamorgan	286 50
Beaver River Bridge, Sheffield	4,988 92
Beaver Bridge, 2nd Line, Sandford	1,022 73
Beaudoin Creek Bridges, Baldwin	685 92
Beech Lake Bridge, Stanhope	1,976 46

PUBLIC WORKS.—*Continued*

Name of Work	Amount
Black Creek Bridge, Baldwin	$ 290 20
Boulton Creek Bridge, Alden	798 00
Bridgeland Road Bridges	1,417 45
Brennan Creek Bridges, Con. A., Hagarty	487 00
Burnt River Bridge, Con. 11, Somerville	2,782 80
Burriss Bridge, 10 and 11, Con. 4	508 80
Boyne Creek Bridge, Dwight	940 09
Bothwell Creek Bridge, 25 Sideline, Sydenham	113 96
Baptiste Creek Bridge, Henwood T.L.	932 73
Bluejay Creek Bridge, Tehkummah	948 73
Blue Sea Bridge, Con. 1, Bonfield	265 03
Blue Sea Bridge, Con. 10, Bonfield	407 74
Cascade Bridge, Parry Sound, Conditional Grant	2,734 05
Chippawa Creek Bridge, Con. 3, Widdifield	499 65
Clyde River Bridge, Trout Creek, Canonto	800 00
Commanda Bridge, Nipissing Road	2,198 44
Cummings Creek Bridge, Gould	285 00
Cache Creek Bridges	970 99
Casimir-Jennings Bridges	974 70
Dickson Bay Bridge	507 50
Dufferin Creek Bridges, Nipissing Road, Spence	128 00
Dunn's Rapids Bridge, Galbraith	529 76
Egan Creek Bridge, Lot 10, Dungannon	416 35
Eneos Creek Bridge, Lyndock	500 00
Equipment, Instruments and Machinery, etc.	7,975 47
Echo Creek Bridge, Baysville, Dorset Road	1,107 65
Falardeau Bridge, White River	16,926 73
Fishways, Construction of	704 01
Fifteenth Sideline Bridge, Black Creek, Stisted	186 00
First Concession Bridge, 8 and 9, Morley	808 06
Fifth Concession Bridge, Barrett Creek, Cameron	500 00
Fox Lake Bridge, Stisted	867 40
Fraser Creek Bridge, Carlow	702 06
Furnace Falls Bridge	3,492 30
Great Northern Road Bridge, Plummer	94 00
Galbraith Bridge, Campbell	64 90
Galbraith Bridge, Con. 2	580 37
Glass Mill Bridge, Monck	1,680 99
Gore Bay, Main Street Bridge	1,488 03
Gore Bay, Sections 21 and 22, Korah	1,037 35
Gleason Bridge	50 73
Gordon's Bridge, Trout Creek, Ridout	799 41
Grant Road Bridge, Morrison	316 34
Hagar Creek Bridge, Lot 2, Con. 4	215 25
Hagarty Creek Bridge, Con. 2	283 00
Harlowe-Casey Townline Bridges	2,920 89
Hog Creek Bridge, 5 and 6, Sideline, Tay	468 44
Hudson Creek Bridge, Lot 6, Con. 2, Kerns	1,023 98
Hurd Creek Bridge, Con. 21, Grattan	263 45
Hurdville Bridge, McKellar	3,132 27
Hog Creek Bridge, 5th Con. T.	1,261 43
Ice Lake Bridge, Allan	554 40
Indian Point Bridge	2,475 98
Indian River Bridge, Con. 18, Keppel	2,053 70
Janes Bridge, Sturgeon River	3,439 71
Jenkins Bridge, Con. 12, Monteagle	497 09
Judge Bridge, reflooring	969 27
Kilby Bridge, Lot 12, Con. 5, Algoma	504 03
Killaloe Bridge, Brennan Creek	954 94

PUBLIC WORKS.—*Continued*

Name of Work	Amount
Laplante Bridge, Con. 8, Bonfield	$ 534 28
Lash-Devlin Bridge, Section 30	609 38
Le Clair Creek Bridge, Con. 10, Ferris	499 78
Little Madawaska Bridge, Sherwood	398 50
Little Otter Bridge, Ingram T.L.	544 01
Love Mill Bridge, Clyde River, Canonto	1,380 18
Lockmasters, Bridgetenders, Caretakers, etc.	5,273 00
Maintenance, Locks, Dams, etc.	79,459 13
McCartney Bridge, Armour	1,689 14
McKelvie Bridge, McIrvine	2,260 88
McLeod's Bridge, Con. 4, Aberdeen	430 68
Marl Creek Bridge, Con. 11, Vespra	530 86
Mattawan Bridge, Dawson Road	2,249 84
Mission Bridge, Kenora	208 00
Moreau Bridge, 15 Sideline, Ferris	497 91
Mullett and Bradley Creek Bridges, Mayo	583 52
Neelon Bridge, Lot 3, Con. 1	613 36
Nestorville Bridge, Lefroy	947 05
North River Bridge, 3rd Line, Matchedash	3,713 21
North Creek Bridge, Con. A, Widdifield	2,163 65
North and Pine Street Bridges, New Liskeard, Grant	1,400 00
North Road Culvert	2,196 04
Oro and Tecumseth Bridges (Special Warrant)	6,605 11
Papineau Creek Bridge	529 75
Pelletier Bridge, Mellick	496 27
Pickerel Creek Bridge, Con. 6, Bright	144 41
Port Carling Works	9,688 08
Quadville Bridge, Lyndock	895 45
Rainy Lake Bridge, Con. 1, Shawanaga	203 25
Rice Creek Bridge, Mellick	230 18
River Road Bridge, Morley	1,178 83
Robinson Creek Bridge, Norway Point, Ridout	573 07
Root Bridge, Sections 8 and 9, Tarentorus	1,841 67
Ryde-Draper Bridge, Lot 14	205 50
Sauble Bridge, Con. 12, Amabel	4,094 85
Sharbot Lake Bridge	179 53
Southern Bridge, Sturgeon Falls	3,191 24
Searchmont Bridge, Goulais River	12,881 09
Shewfield Creek Bridge	470 37
Shakespeare Bridge, Lot 7, Con. 1	399 50
Shawanaga Bridge, Con. 2, Burpee	433 75
Sideline Bridge, Tiny	424 39
Silver Mountain Road Bridges, Gillies	464 67
Silver Creek Bridge, South Algoma	467 70
Silver Creek Bridge, Orillia T.L.	1,906 13
Sixth Con. Bridge, Lot 9, Hagar	498 45
Sixth Con. Bridge, Beaver Creek, Gillies	431 53
Sixth Line Bridge, Sauble River, Amabel	5,630 03
Skeleton River Bridge, Parry Sound Road, Watt	2,235 35
Slate River Bridges, 2nd Line, Paipoonge	2,921 29
Smeltzer Creek Bridge, Raglan	394 25
Sucker Creek Bridge, Ferris-Chisholm	494 60
South Pine Bridge, Morley	963 60
Storing Bridge, to complete	995 40
Station Bridge, Bar River	2,037 21
Sturgeon Bridge, Dobie	628 93
Sunshine Creek Bridge, 2nd Line	47 00
Swayne's Creek Bridge, Limerick	491 00
Succor Creek Bridge, Johnston T.L., Con. 2	1,458 03
Swamp Creek Bridge, Boulter	471 00
Surveys and Inspections	7,980 61

PUBLIC WORKS.—*Continued*

Name of Work	Amount
Third Line Bridge, South River	$ 4,458 47
Third Line Bridge, Lot 6, Matchedash	1,317 65
Thirteenth Line Bridge, South River	4,589 49
Turtle Creek Bridge, Sheguiandah	1,059 41
Trout Creek Bridge	1,481 15
Tehkummah Bridge, Con. 6	349 20
Ufford Road Bridge, Lot 13, Con. 4, Watt	411 01
Wabigoon Bridge, Con. 4, Sanford	2,994 83
Walters' Falls Bridge, Holland	3,908 99
Waterhouse Creek Bridge, Faraday	399 85
Willett Creek Bridge, Gordon	794 60
White Oak Bridge, Humphrey	2,861 11
Whitestone Bridge	1,296 53
Whitson Creek Bridge, 5th Line, Balfour	631 70
Whitson Creek Bridge, 5th Line, Rayside	68 47
Wye River Bridge, Tiny	395 62
Worthington Bridge	589 76
Wages and Expenses, Supervising Foremen	3,915 00
Workmen Injured, Compensation for	966 54
York River Bridge, Con. 10, Carlow	2,488 53
PUBLIC WORKS—BRIDGES, ETC.	$316,038 33

DRAINAGE WORKS:

Algoma District Drainage	$2,023 44
Amabel Drain, Mud Lake	799 25
Arran Lake Outlet, Arran	499 37
East Simcoe District Drainage	678 88
Harlowe Road Drain, Kennebec	588 50
Keppel Drain, Con. 18	1,033 63
Krantz Drain, North Algoma, Conditional	487 85
Lindsay Township Drain	400 00
Manitoulin District Drainage	1,997 33
Muskoka District Drainage	919 39
Nipissing District Drainage	1,999 75
North-east Drain, Arran	796 00
North Hastings District Drainage	1,947 70
Oak Flat Road Drain	177 54
Parry Sound District Drainage	428 58
Pickerel Creek Drain, Alden	399 98
Rainy River Drainage Works	4,065 98
Rama Drains	900 00
Sturgeon Falls District Drainage	2,206 33
Sudbury District Drainage	2,178 25
Temiskaming District Drainage	1,773 86
Willow Creek Drain, Vespra	1,422 37
TOTAL DRAINAGE WORKS	$27,723 98

SUMMARY:

Civil Government	$71,703 46	
Government Buildings, Maintenance and Repairs	491,209 39	
Public Buildings	1,487,922 46	
Public Works, Bridges, etc.	316,038 33	
Public Works, Drainage	27,723 98	
GRAND TOTAL		$2,394,597 62

CLOTILDE KENTLETON,
Accountant, Public Works.

Department of Public Works, Ontario,
Toronto, March, 1922.

Department of Public Works, Ontario.
Toronto, March 1st, 1922.

Honourable F. C. Biggs,
Minister of Public Works and Highways.

Sir,—I have the honour to submit the following statement showing the several contracts and bonds entered into with His Majesty during the twelve months ending 31st October, 1921, in connection with the Public Buildings and Works, subject to the control of the Public Works Department of Ontario.

I have the honour to be,

Sir,

Your obedient servant,

H. F. McNaughten,
Secretary and Law Clerk.

STATEMENT showing the several contracts and bonds entered into with His Majesty during the twelve months ending 31st October, 1921, in connection with the Public Buildings and Works subject to the control of the Public Works Department, Ontario.

Date	Location of Work	Subject of Work	Contractors	Sureties	Amount
1920 Nov. 10	Whitby Hospital	Heating and Ventilating Equipment for Acute Building.	Purdy, Mansell, Limited, Toronto.	Fred J. Lucas and Percy C. Mansell, Toronto.	$58,960 00
Nov. 10	Whitby Hospital	Steel Sash and Transom Frames, Acute Hospital.	A. B. Ormsby Co., Limited, Toronto.		3,412 00
Nov. 17	Sturgeon Falls English and French Training School.	Plumbing, Heating and Ventilating.	McKelvey & Birch, Ltd., Kingston, Ont.	C. A. Macpherson and J. J. Druce, Kingston.	18,227 00
Nov. 17	Matheson Public School	Plumbing, Heating and Ventilating.	Albert Brazeau, Timmins, Ont.	Marshal Ecclestone, Ltd., and D. Sutherland, Timmins, Ont.	5,784 00
Dec. 1	Toronto Experimental Station, Stanley Park.	Sewage Disposal Filtration Tank and Retaining Walls.	Ramsay Contracting Co., Toronto.	Jas. S. Hart and Henry Watson, Toronto.	4,440 00
Dec. 2	Sturgeon Falls English and French Training School.	Electric Conduit System and Wiring.	Moss & Stocks Electric Co., Toronto.	E. H. Hobson and H. M. Carragus, Toronto.	1,615 00
Dec. 21	Toronto Knox College Building.	Basement Type Elevator with Kalamein Doors.	Turnbull Elevator Mfg. Co., Toronto.		6,390 00
1921 Jan. 29	Toronto Knox College Building.	Structural Steel Work	Hepburn & Disher, Toronto		4,520 00
Feb. 2	Searchmont Bridge over Goulais River.	Steel Spans	Dominion Bridge Co., Ltd., Toronto.		6,125 00
Feb. 28	Toronto Knox College Building.	Tables for Laboratories, Board of Health.	Crown Furniture Co., Ltd., Preston, Ont.		2,625 00
Feb. 25	Burnt River Bridge, North Victoria.	80 ft. Steel Spans, Watson Siding.	Dominion Bridge Co., Ltd., Toronto.		2,770 00

Feb. 25	South River Bridge, Parry Sound.	Supply and Delivery of one 70 ft. span.	Hamilton Bridge Works Co., Ltd., Hamilton.	.....	.....	2,325 00
Feb. 25	Beaver Lake Bridge, Addington.	Supply and Delivery, 80 ft. Steel Span.	Hamilton Bridge Works Co., Ltd., Hamilton.	.....	.....	2,730 00
Feb. 25	Falardeau Bridge over White River, Temiskaming.	Three 90 ft. Steel Spans...	Hamilton Bridge Works Co., Ltd., Hamilton.	.....	.....	9,588 00
Mar. 15	Sault Ste. Marie Court House	Supply of Material and Construction.	Stuart & Sinclair, Ltd., Hamilton.	H. Crosthwaite and W. H. Magill, Hamilton.	.....	191,750 00
Mar. 15	Belleville School for the Deaf.	Cut Stone Work for New Main Building.	Ritchie Cut Stone Co., Ltd. Hamilton, Ont.	C. P. Hardy and Thos. McIlwraith, Hamilton.	.....	24,000 00
Mar. 21	Hamilton Hospital.....	Concrete Ceiling for Top Floor of Orchard House.	W. H. Yates Construction Co., Ltd., Hamilton.	.....	.....	4,837 00
Apr. 8	Belleville School for the Deaf	Supply of Structural Steel for Addition to Main Building.	Hepburn & Disher, Toronto	.....	.....	2,630 00
Apr. 16	Hamilton Hospital.....	Slate and Galvanized Roofing for Orchard House.	Thos. Irwin & Son. Hamilton.	.....	.....	3,785 00
May 5	Kemptville Agricultural School.	Excavating Foundation for Residence and Dining Hall.	Robert Beggs, Hallville....	.....	.....	2,200 00
May 10	Toronto Knox College Building.	Concrete Work.....	Witchall & Son, Toronto..	.....	.....	5,200 00
May 10	Whitby Hospital.....	Supply of Doors.....	R. Laidlaw Lumber Co., Toronto.	.....	.....	3,287 00
May 6	Ottawa Normal School.....	Supply of Coal.....	The Independent Coal Co., Co., Ltd., Ottawa.	R. Richardson and J. B. Lefebvre, Ottawa.	Egg..... Steam..... Slabs.....	14 50 10 00 6 00
May 6	London Normal School.....	Supply of Coal.....	Wm. Buchanan, London ..	J. Holland and E. Fisher, London.	Egg.....	15 50
May 10	Peterborough Normal School	Supply of Coal.....	H. B. Taylor & Sons..... Peterborough.	E. B. Fowler and J. F. Allen, Peterborough.	Egg..... Slabs.....	15 65 6 00

STATEMENT showing the several contracts and bonds entered into with His Majesty during the twelve months ending 31st October, 1921, in connection with the Public Buildings and Works subject to the control of the Public Works Department, Ontario.—Continued

Date	Location of Work	Subject of Work	Contractors	Sureties	Amount	
1921						
May 9	Hamilton Normal School....	Supply of Coal.....	Gillies-Guy, Ltd., Hamilton.	T. E. L. Hetherington and H. W. Robinson, Hamilton.	Egg.....	$ 14 50
					Nut.....	14 50
					Soft.....	9 25
May 7	Belleville School for the Deaf	Supply of Coal.....	Schuster Coal Co., Ltd., Belleville.	John Elliott and L. P. Hughes, Belleville.	Egg.....	16 17
					Stove and nut..	16 37
					Slack.....	8 87
May 17	Hamilton Hospital.....	Plastering Burnt Wing....	Watson Bros., Hamilton ..	.....	.....	4,500 00
May 23	Sauble River Bridge, Bruce County.	Supply of 70 ft. Steel Span	Dominion Bridge Co., Ltd., Toronto.	.....	.....	1,990 00
June 1	Stratford Model School.....	Supply of Coal and Wood.	Fiebig & Heagy, Stratford	J. J. Mason and Jas. Trow, Stratford.	Lump.....	13 00
					Pine Wood....	12 50
June 1	Brantford School for Blind..	Supply of Coal.....	D. McDonald, Brantford..	S. P. Pitcher and W. M. McEwen.	¾ Lump.....	10 20
					Stove.....	15 00
June 2	Toronto Knox College Building.	Lathing and Plastering in New Addition.	Hoidge & Sons, Toronto..	.....	.....	5,125 00
June 9	North Bay Normal School...	Supply of Coal.....	Lindsay & McCluskey, North Bay.	N. R. Charlton and M. C. Putnam, North Bay.	Smokeless.....	12 50
					Nut.....	16 50
					Pine Slabs.....	6 50
June 8	Kemptville Agricultural School.	Construction of Students' Residence and Dining Hall	Taylor & Lackey, Ottawa.	E. M. Barrett and Jas. Hill, Ottawa.	.....	80,990 00
May 21	Guelph Agricultural College, Veterinary College and Dairy Building.	Supply and Construction of Veterinary College and Dairy Building.	The Schultz Bros., Ltd., Brantford.	E. R. Reed and C. J. Parker, Brantford.	.....	271,500 00
June 28	Toronto Parliament Buildings and Government House.	Supply of Smokeless Run of Mine.	The Scott Coal Co., Ltd., Toronto.	The United States Fidelity & Guaranty Co., Toronto	Parl. Bldgs.....	8 90
					Gov. House....	9 10

June 29	Toronto Parliament Buildings, Government House, Osgoode Hall, Veterinary College, Normal School.	Supply of Hard and Soft Coal.	P. Burns Co., Ltd., Toronto.	J. J. Burns and Geo. D. Macdonald.	Par. Bldgs, et al., Hard Coal... 14 95 Vet. College, Mine Run... 9 25	
July 7	Guelph Agricultural College	Plumbing in Main Building	Albert W. Smith Co., Ltd., Guelph.	.....	.....	3,241 00
Aug. 10	Belleville School for the Deaf	Plumbing, Heating and Ventilating in Main Building.	McKelvey & Birch, Ltd., Kingston.	C. A. Macpherson and J. J. Druce, Kingston.	.....	21,127 00
Aug. 10	Kemptville Agricultural School.	Plumbing, Heating and Ventilating System, Students' Residence.	Purdy, Mansell, Limited, Toronto.	A. K. Purdy and P. C. Mansell.	.....	20,575 00
Aug. 13	Guelph Agricultural College	Addition to Boiler House and Drains	Geo. C. Walker, Guelph..	.....	.....	2,950 00
Aug. 19	Janes Bridge over Sturgeon River, Sturgeon Falls Dist.	70 ft. Steel Span.....	Hamilton Bridge Works Co., Ltd., Hamilton.	.....	.....	1,698 00
Aug. 22	Sault Ste. Marie Court House	Passenger Elevator, Basement Type.	Otis-Fensom Elevator Co., Toronto.	.....	.....	6,144 00
Aug. 24	Whitby Hospital, Men's Acute Building.	Supply and Installation, Heating and Ventilating System.	Purdy, Mansell, Limited, Toronto.	A. K. Purdy and P. C. Mansell, Toronto.	.....	21,990 00
Aug. 19	Belleville School for the Deaf	Construction Stair Work..	Canadian Ornamental Iron Co., Ltd., Toronto.	.....	.....	5,200 00
Aug. 30	Kemptville Agricultural College.	Sewage Disposal Plant....	Taylor & Lackey, Ottawa.	.....	.....	6,995 00
Sept. 2	Monteith Northern Academy	Alterations and Additions to Academy.	P. H. Joannisse & Co., Ltd., Cobalt.	Canadian Surety Co., Toronto.	.....	5,815 00
Sept. 9	Parry Sound Court House...	Alterations and Additions	Stuart & Sinclair, Hamilton	W. J. Southam and A. W. Woodhall.	.....	36,210 00
Sept. 9	Sunshine Bridge over Mattawan River, Conmee Township.	Supply and Delivery, Steel Superstructure.	Hamilton Bridge Works, Co., Hamilton.	.....	.....	4,630 00

STATEMENT showing the several contracts and bonds entered into with His Majesty during the twelve months ending October 31st, 1921, in connection with the Public Buildings and Works subject to the control of the Public Works Department, Ontario.—Continued

Date	Location of Work	Subject of Work	Contractors	Sureties	Amount
1921 Sept. 29	Cascade Bridge over Seguin River, Parry Sound.	Steel Superstructure.....	Hamilton Bridge Works Co., Ltd., Hamilton.	.....	..... $ 5,170 00
Sept. 23	Belleville School for the Deaf	Carpenter and Joiner Work in Main Building.	Brown-Sword Co., Belleville.	C. A. Cameron and W. H. Patterson, Belleville.	..... 19,365 80 .....
Sept. 23	Belleville School for the Deaf	Lathing and Plastering in Main Building.....	Alf. D. Grant, Toronto....	United States Fidelity & Guaranty Co., Toronto.	..... 14,500 00
Sept. 23	Belleville School for the Deaf	Electric Conduit System, Main Building.....	Toronto Electric Co., Toronto.	Geo. Cruise and Arthur Orpen, Toronto.	..... 4,173 00
Sept. 23	Belleville School for the Deaf	Painting and Glazing, Main Building	Hart Bros., Belleville.....	Chas. Hanna and J. G. Galloway, Belleville.	..... 2,530 00
Oct. 13	Cascade Bridge over Seguin River, Parry Sound	Filling for Bridge.....	John Argue, Parry Sound..	.....	Per cu. yard... 75
Oct. 13	Kingston Hospital.....	60,000 gal. Steel Water Tank.	Canadian Des Moines Co., Ltd., Chatham.	.....	..... 8,620 00
Oct. 19	Port Carling Steel Bridges, Muskoka.	Supply of 1 Steel Fixed Span and 1 Steel Swing Span.	Dominion Bridge Co., Ltd., Toronto.	.....	Swing Span.... 4,135 00 Fixed Span..... 2,595 00
Oct. 26	Wright's Creek Bridge, Temiskaming.	80 ft. Steel Span.....	Standard Steel Construction Co., Welland, Ont.	.....	..... 1,830 00

H. F. McNAUGHTEN,
Secretary and Law Clerk,
Department of Public Works, Ontario.

Fifteenth Annual Report

OF THE

GAME AND FISHERIES DEPARTMENT

1921

PRINTED BY ORDER OF

THE LEGISLATIVE ASSEMBLY OF ONTARIO

TORONTO:
Printed and Published by CLARKSON W. JAMES, Printer to the King's Most Excellent Majesty
1922

Printed by
THE RYERSON PRESS.

To His Honour Henry Cockshutt, Esq.,

Lieutenant-Governor of the Province of Ontario.

May it Please Your Honour:

I have the honour to submit herewith, for the information of Your Honour and the Legislative Assembly, the Fifteenth Annual Report of the Game and Fisheries Department of this Province.

I have the honour to be,

Your Honour's most obedient servant,

H. Mills,

Minister of Mines.

Toronto, 1922

FIFTEENTH ANNUAL REPORT

OF THE

Game and Fisheries Department of Ontario

To the Honourable H. Mills,

Minister of Mines.

Sir,—I have the honour to place before you the Fifteenth Annual Report of the work of the Game and Fisheries Department for the fiscal year ending the 31st day of October, 1921. The net revenue of the Department continues to increase and for the first time it will be shown that the net surplus in the Department proper exceeds the total expenditures by $37,755.12, and the total net revenue for the year amounts to $379,739.16, of which amount the Department proper contributed $325,363.99, and the Sales Branch $54,375.17. A statement of the Sales Branch operations is shown elsewhere in this report.

Comparative Statement of Revenue and Expenditure—
1916-1921, Inc. as shown in the Public Accounts.

	Revenue.	Expenditure.	Surplus.
1916	$174,186 71	$157,681 94	$16,504 77
1917	219,442 94	154,055 17	65,387 77
1918	258,671 62	167,795 22	90,876 40
1919	346,197 14	185,247 72	160,949 42
1920	466,550 86	239,978 13	226,572 73
1921	612,972 86	287,608 87	325,363 99
Sales Branch.			
1921	$258,057 73	$203,682 56	$54,375 17

Statistics

The different figures and statements presented herein furnishing statistics of the Department have been carefully prepared and provides very interesting and valuable information.

Fish.

The commercial fisheries of the Province are shown in comparison, as follows:—

	1919	1920	1921
Gill Nets licensed (yards)	5,960,158	5,501,827	6,181,883
Seines "	190	168	180
Pound Nets "	1,144	1,080	1,052
Hoop Nets "	1,417	1,442	1,445
Dip and Roll Nets licensed	36	29	41
Spears "	199	122	116
Hooks "	69,000	64,330	78,663
Number of men employed	4,156	3,693	3,600
Number of Tugs	123	124	116
" Gasoline Boats	768	803	924
" Sail or Row Boats	1,285	1,088	1,109
Estimated value of boats, ice houses, wharves and twine	$3,039,682 00	$3,269,971 00	$3,151,810 00
Aggregate Catch in Pounds	38,145,458	38,501,533	36,444,372
Estimated value to fishermen	$2,721,440 24	$2,691,093 74	$2,656,775 82

Angling.

The fee for non-resident Angling permits was increased from $2.00 to $5.00 during the year, and from this source a substantial increase in revenue has been obtained, while the reports received from almost every district show that game fish are still plentiful and furnishes ample sport to both resident and non-resident alike.

Hatcheries.

A large and modern Hatchery was built and equipped by the Department during the year at Sault Ste. Marie, and all necessary arrangements made to fill it to capacity with whitefish, salmon trout and speckled trout spawn to be hatched and delivered during the coming season. A Hatchery at this point will fill a long-felt need of the district, as it is in the centre of very valuable commercial fisheries and also very accessible to many waters that abound in game fish, but which would soon become depleted without the assistance of artificial propagation. The location of this hatchery also renders the collection of commercial and game fish spawn possible with a reasonable amount of energy and expense.

A detailed report of the output of the various provincial hatcheries will be shown elsewhere in this report, and the summary as compared with the previous year can be considered satisfactory, which is as follows:—

	1920	1921
Whitefish Fry	43,985,000	115,950,000
Pickerel "	31,030,000	27,625,000
Lake Trout "	1,134,000	110,400
Herring "	920,000	9,740,000
Speckled Trout Fingerlings and Fry	286,700	1,147,500
Black Bass Fingerlings "	427,200	773,500
Parent Bass	460	742
	77,783,360	155,347,142

The demand for fry and fingerlings is greater than the present available supply, and the Department should extend this work as far as any reasonable expenditure will permit.

The total fry distributed yearly since 1912 is as follows:—

1912	150,000	1917	2,156,928
1913	173,815	1918	58,356,631
1914	598,630	1919	22,361,748
1915	1,697,425	1920	77,783,360
1916	1,570,450	1921	155,347,142

Game Sanctuaries.

At present only a few small areas are set aside by this Department, viz.,—

Miner Farm Sanctuary.
Peasemarsh Farm Sanctuary.
Nopiming Game Sanctuary.
Eugenia Fish and Game Preserve.

The latter has only been recently established and only made possible to a large extent by the co-operation of the Hydro Electric Power Commission, who have given permission to use a large island exclusively for the rearing of water fowl

and other game birds and animals. The water on this Sanctuary will be protected and made attractive for water fowl of every specie while the collecting of speckled trout spawn at this point will prove beneficial when developed and distributed as fry to all suitable waters.

Wild Celery and Wild Rice.

During the year the Department caused a quantity of wild celery plants and wild rice seed to be placed in suitable waters in the districts of Muskoka, Parry Sound and other districts as far west as Rainy River and Kenora, and the results obtained have shown the success of the undertaking and worthy of further work of this nature, which is given every support by the many local fish and game associations. These plants reproduce and spread rapidly and will soon provide the needed food to attract water-fowl in the various districts.

Game.

Moose and Deer.—In issuing resident moose and deer licenses for the year, a questionaire was furnished with a view of ascertaining sportsmen's opinion on taking deer with dogs, and also as to open seasons. The results of this questionaire by Counties or Districts were as follows:—

County or District	Favoring use of Dogs		Against use of Dogs		Totals	
	Local Hunters	non-local Hunters	Local Hunters	non-local Hunters	Favoring Dogs	Against Dogs
Addington	59	156	41	46	215	87
Algoma	337	163	722	140	500	862
Bruce	65	7	23	1	72	24
Carleton	113	24	37	1	137	38
Dundas	3				3	
Frontenac	318	139	108	34	457	142
Grenville	35	8	2		43	2
Haliburton	55	287	6	53	342	59
Hastings	554	320	251	59	874	310
Kenora	49		166		49	166
Lanark	205	49	104	4	254	108
Leeds	1			1	1	1
Manitoulin	12	45	62	19	57	81
Muskoka	317	419	77	164	736	241
Nipissing	229	655	305	278	884	583
Parry Sound	596	1,967	438	699	2,563	1,137
Peterboro	367	402	59	116	769	175
Rainy River	20	3	105	1	23	106
Renfrew	368	167	618	103	535	721
Russell and Prescott	26	2			28	
Sudbury	157	319	367	206	476	573
Timiskaming	55	31	61	38	86	99
Thunder Bay	38	7	329	6	45	335
Victoria	73	21	30	11	94	41
Unclassified		621		272	621	272

Summary

	Local Hunters	Non-Local Hunters	Total
Favoring use of Dogs	4,052	5,812	9,864
Against use of Dogs	3,911	2,252	6,163
Number of local hunters questioned	7,963		
Number of non-local hunters questioned		8,064	

The questionaire was not submitted to settlers who are entitled to one deer each season without a license.

Number of hunters voting in favor of the present open seasons for deer	12,762
Number of hunters voting against the present open seasons for deer	1,056
Majority for present open seasons	11,706

Both deer and moose are reported to be quite plentiful; and licenses were issued in comparison with the previous year as follows:—

	1920	1921
Resident Moose	1,988	1,989
" Deer	16,943	18,689
Non-resident Hunting	796	950

Ruffed Grouse commonly known as *Partridge.*—An open season for these game birds was once more in effect, and they have again become quite well established according to reports received from the districts where they are usually found.

Quail and Pheasants are reported to a limited extent only in the south-western part of the province.

Ducks and Geese are reported as plentiful and the season for same has been a satisfactory one to the sportsmen.

Furs.

The Fur market for the year has been quite satisfactory, and while it has been unsteady at times, yet inflated values were not obtained as in the previous year.

	1920	1921
Licenses issued to Fur Dealers	$34,850 27	$55,007 00
" " Trappers	75,223 54	99,360 00

These increases in revenue can be considered as satisfactory particularly when the market was such as to offer no extreme profits to either trapper or dealer, as was obtained during the early part of the 1920 season.

Beaver.—Are still being taken in large numbers.

Otter, Marten and Fisher.—Continue to be scarce.

Muskrat.—Show a slight increase over the previous year.

A comparison of pelts exported and tanned for the year as compared with the previous year is shown herewith:—

	1920 Exported and Tanned	1921 Exported and Tanned
Beaver	96,006	95,479
Otter	4,094	4,759
Fisher	4,069	2,602
Marten	6,315	6,533
Mink	33,695	42,667
Muskrat	434,066	479,866
Bear	409x	1,494
Fox (Cross)	39x	287
" (Red)	231x	5,282
" (Silver or Black)	11x	153
" (White)	.....	351
" (Not specified)	240x	23
Lynx	170x	591
Raccoon	321x	11,951

Skunk	1,082x	47,121
Weasel	3,095x	58,898
Wolverine	.....	12
Total	583,843	758,069

The figures marked with x cover a period of only five months of the year 1920. The estimated value to the trapper based on an average of the prices paid for the year is $3,268,967.50.

Fur Farming.

During the year fur farming permits were issued to keep for propagation purposes, approximately the following number of fur-bearing animals:—

Beaver	2	Fox (Black)	103
Fisher	3	Lynx	2
Fox (Cross)	240	Mink	83
Fox (Red)	132	Raccoon	37
Fox (Silver)	593	Skunk	74

Enforcement of Act.

The re-organization of the outside service was in effect for the first complete year, and the results obtained were very satisfactory. With a continuation of the system now established, a better enforcement of the laws will be attained than under the system discontinued in the fall of 1920.

Acknowledgment.

In closing this report I desire to state that the Department has received willing co-operation in all matters from the Federal Government, Railway Officials and from the members of all Fish and Game Protective Associations seeking to establish better conditions and conservation of all game and fish. The staff has been loyal and efficient, and to them considerable credit is due for the continued success of the Department.

All statistics referred to will be found elsewhere in this report, together with many other statistics in detail.

All of which is respectfully submitted.

I am,

Your obedient servant,

(Sgd.) D. McDonald,

Deputy Minister of Game and Fisheries

STATEMENT OF REVENUE RECEIVED BY DEPARTMENT OF GAME AND FISHERIES DURING YEAR ENDING OCTOBER 31, 1921

GAME

Royalty on Furs	$ 71,907 88	
Royalty of Coupons	108,268 87	
Trappers' Licenses	56,947 40	
Non-Resident Hunting Licenses	23,750 00	
Resident Deer Licenses	56,067 00	
Resident Moose Licenses	9,945 00	
Fur Dealers' Licenses	55,295 00	
Tanners' Licenses	395 00	
Game Dealers' Licenses	645,00	
Hotel and Restaurant Licenses etc	412 00	
Cold Storage Licenses	185 00	
Guides' Licenses	1,864 00	
Fines—Game	18,125 44	
Sales—Game	12,449 25	
		$ 416,256 84

FISHERIES

Fishing Licenses	128,850 00	
Royalty, Fish	5,350 85	
Angling Permits	56,565 00	
Fines—Fish	1,776 59	
Sales—Fish	2,523 79	
Miscellaneous	1,649 79	
		$ 196,716.02

GOVERNMENT FISH

Sales of Fish, etc	258,057 73	$ 258,057 73
Total		$ 871,030 59

D. McDonald, Esq.
Deputy Minister of Game and Fisheries,
Parliament Buildings.

Dear Sir:—

I have pleasure in handing you herewith a financial report of the Sales Branch for the fiscal year ending October 31st, 1921, by which you will note that there has been a surplus of cash received over expenditures amounting to $54,375.17.

The total fish purchased for the year amounts to 2,055,706 lbs. as against 2,269,401 lbs. of the previous year, and the municipalities supplied during the past year being 85 with 237 dealers, against 94 municipalities with 214 dealers for the previous year.

All of which is respectfully submitted.

Yours truly,
(Sgd) Geo. H. Rapsey,
Superintendent.

SALES BRANCH

INCOME AND EXPENDITURE FOR YEAR ENDING OCTOBER 31st, 1921

INCOME

Cash, Paid Treasurer		$ 258,057 73

EXPENDITURE

Paid Fishermen	$ 111,961 56	
Express, freight and cartage	39,341 92	
Boxes and cases	10,501 79	
St. Thomas Warehouse charges	122 36	
Toronto Warehouse charges	20,321 16	
Wages, Packing and Shipping, Macdiarmid	5,981 58	
Salaries, Macdiarmid	2,100 00	
Salaries, Toronto Offices	5,205 26	
Commission,—Purchasing	875 54	
Travelling Expenses	161 95	
Sundry Expense, Macdiarmid	2,013 92	
Sundry Expense, Toronto	72 35	
Ice	1,894 20	
Postage and Stationery	607 61	
Buildings,—Docks, Warehouse etc., Macdiarmid	553 07	
Equipment and supplies, Macdiarmid	619 61	
Horses, Vehicle and Motor Boat Expense	1,063 62	
Telephone & Telegraph	265 60	
Miscellaneous Expense	19 46	
	$ 203,682 56	
Surplus Cash in Treasury over expenditure	54,375 17	
		$ 258,057 73

WATERS STOCKED

QUANTITIES AND KINDS OF FISH PLANTED IN 1921.

Black Bass Fry and Fingerlings.

Waters	County	Quantity
Kebesquashing Lake	Algoma	5,000
Blue Lake	Brant	2,000
Purvis Lake	Bruce	10,000
Royal Milling Company's Pond	"	10,000
Krug Brother's Pond	"	10,000
Scone Pond	"	10,000
Sharbot Lake	Frontenac	10,000
Chippego Lake	"	10,000
Fish Lake	"	10,000
Lake Mossonoga	"	10,000
McCall Lake	Grey	2,500
McCormick Lake	"	2,500
Cocklong Lake	Haliburton	20,000
Stoco Lake	Hastings	2,500
Crow Lake	"	5,000
Oak Hill Lake	"	5,000
Beaver Creek	"	2,500
Deer River	"	2,500
Moira River	"	2,500
Wolfe Lake	"	2,500
Rat Portage Bay	Kenora	2,500
Black Lake	Lanark	10,000
Riven's Lake	"	10,000
Charleston Lake	Leeds	10,000
Rideau Lakes	"	10,000
South Lake	"	10,000
Sixteen Mile Creek	Lincoln	3,500
Fifteen Mile Creek	"	1,500
Thames River and Tributaries	Middlesex	10,000
Pond Mills	"	10,000
Whittaker Lake	"	10,000
Bear Creek	"	5,000
" "	"	2,500
Medway Creek	"	10,000
Tobacco Lake	Manitoulin	2,000
Muskoka Lake	Muskoka	20,000
Lake Joseph	"	20,000
Lake of Bays	"	20,000
Mary Lake	"	10,000
Lake Rosseau	"	20,000
Sparrow Lake	"	20,000
Clear Lake	"	5,000
Clearwater Lake	"	15,000
Green Lake	"	10,000
Bella Lake	"	10,000
Cache Lake, Algonquin Park	Nipissing	50,000
Smoke Lake, " "	"	25,000
Grand Lake, " "	"	25,000
Lake Nipissing	"	15,000
Otter Lake	"	10,000
Four Mile Lake	"	10,000
Trout Lake	"	10,000
Lake Nosbinsing	"	10,000
Presque Isle Bay	Northumberland	5,000
Cold Creek Mill Pond	"	10,000
Harris Lake	Parry Sound	10,000
Meades Lake	" "	5,000
Whitefish Lake	" "	10,000
Mill Lake	" "	7,500
Roblins Lake	Prince Edward	5,000
Consecon Lake	" "	5,000
Indian River	Peterborough	10,000
Balsam Lake	"	10,000
Pigeon Lake	"	10,000
Buckhorn Lake	"	10,000

WATERS STOCKED

QUANTITIES AND KINDS OF FISH PLANTED IN 1921.—*Continued.*

Black Bass Fry and Fingerlings

Waters	County	Quantity
Chemong Lake	Peterborough	5,000
Victoria Lake	Perth	10,000
Lake Dore	Renfrew	10,000
Little Lake	Simcoe	8,750
Lake Semple	"	1,250
Clear Lake	Sudbury	2,500
Lovering Lake	"	2,500
Crabb Lake	"	2,500
Kaministiqua River	Thunder Bay	2,000
Grand River and Creek	Waterloo	10,000
Speed River	"	20,000
Hamilton Bay	Wentworth	10,000
Sturgeon Lake	Victoria	10,000
Cameron Lake	"	10,000
Lake Simcoe, Brough's Creek and Narrows at Atherly	York, Simcoe, and Ontario	25,000
Total		773,500

Parent Black Bass

Spruce Lake	Kenora	125
Rock Lake	"	126
Guy Lake	"	49
Bob Lake	"	49
Flambeau Lake	"	49
Pritchard Lake	Kenora	49
Boose Lake	"	49
Lac des Mille Lacs	Thunder Bay	246
Total		742

Speckled Trout Fry and Fingerlings

Waters	County	Quantity
Long Lake	Algoma	10,000
Gorman's Spring Creek	Brant	2,000
Silver Creek	Bruce	10,000
Merchant's Creek	"	5,000
Quigley Stream	"	1,000
Vance Stream	"	1,000
Gillespie Stream	"	1,000
Gibson's Creek	"	2,500
Spring Creek	"	10,000
Cavan Creek	Durham	24,500
Canton Creek	"	7,500
Tyrone Creek	"	15,000
Wilmot's Creek	"	10,000
Manver's Creeks	"	7,500
Spring Creek	Elgin	10,000
Eagle Lake	Frontenac	10,000
Saugeen River	Grey	10,000
Rocky Saugeen	"	2,000
Sydenham River. "Harrison's Park"	"	25,000
Holstein Mill Pond	"	2,000
Riley's Creek	"	2,500
Henderson's Creek	"	10,000
Spring Creek, Chesley	"	5,000
Tara Creek	"	5,000
Little River	"	10,000
Bothwell's Creek	"	2,500
Big Creek	Huron	10,000
Eagle Lake	Haliburton	2,500
Drag Lake	"	2,500

WATERS STOCKED

QUANTITIES AND KINDS OF FISH PLANTED IN 1921—*Continued.*

Speckled Trout Fry and Fingerlings

Waters	County	Quantity
Redstone Lake	"	5,000
Fairy Lake	Halton	20,000
Main Creek	"	5,000
Squire's Creek	Hastings	12,500
Rawdon Creek	"	7,500
Burk's Creek	"	5,000
Duncrief's Creek	Middlesex	10,000
Currie's Pond	"	10,000
River Wye	"	10,000
Bear Creek	"	5,000
Douty Creek	"	10,000
Artificial Lake draining into Thames River	"	5,000
Lake Wolsley Channel	Manitoulin	5,000
Stream from Ice Lake	"	5,000
Barr's Creek	"	2,000
Chalk Lake	Muskoka	5,000
Muskoka River	"	20,000
Skeleton Lake	"	5,000
Fry's Lake	"	10,000
Bass Lake	"	10,000
Waters in vicinity of Simcoe	Norfolk	10,000
Patterson's, Kent's, Crane and Cattle Creeks	"	23,000
Lynn Valley Creek	"	10,000
Beaupre's Creek	"	10,000
Deases Creek	"	3,000
Gleadall's Creek	"	4,000
Carpenter's Creek	"	1,000
Spooky Hollow Stream	"	1,000
Spring Valley Pond	Northumberland	10,000
Trout Creek	"	10,000
Barrett's Creek	"	1,500
Break-a-Way Creek	"	5,000
Little Cold Creek	"	5,000
Fourth Concession Creeks	"	10,000
Baltimore Creek	"	20,000
Brooklin Stream	"	10,000
Spring Creeks	Ontario	10,000
Cedar Creek and Ponds	Oxford	5,000
Dower Creek	"	5,000
Streams in East and West Oxford	"	5,000
Sucker Lake	Parry Sound	10,000
Forest Lake	" "	5,000
Ouse and Pakenham Creeks	Peterborough	10,000
Deer Lake	"	10,000
Cold Creek	Peel	3,000
Spring Creek	Perth	2,000
Otter Creek	"	10,000
Eva Lake	Rainy River	10,000
French Lake	" "	5,000
Coldwater River	Simcoe	10,000
McDonald's Creek	"	1,500
Sturgeon River	"	10,000
Lakes and Streams in Township of Hess	Sudbury	40,000
Spring Lake Creek	"	5,000
Hardwood Lake	"	15,000
McKenzie River	Thunder Bay	20,000
Lake Wideman	" "	10,000
Gurney River	" "	10,000
Lower Twin Lake	" "	20,000
Upper Twin Lake	" "	10,000
Loon Lake	" "	10,000
Silver Lake	" "	10,000
Pearl River	" "	20,000
McIntyre Creek	" "	10,000

WATERS STOCKED

QUANTITIES AND KINDS OF FISH PLANTED IN 1921—*Continued*

Speckled Trout Fry and Fingerlings

Waters	County	Quantity
Six Mile Creek	" "	25,000
Three Mile Creek	" "	10,000
Corbett's Creek	" "	20,000
Slate River	" "	10,000
Pine River	" "	20,000
Currant River	" "	20,000
Cedar Creek	" "	10,000
Silver Islet Creek	" "	5,000
McVicar's Creek	" "	10,000
Seven Mile Creek	" "	5,000
Neebing River	" "	10,000
Sunshine Creek	" "	5,000
Oliver Lake	" "	15,000
Brulu Creek	" "	5,000
Steel River	" "	10,000
Nipigon River	" "	20,000
Indian Creek	Temiskaming	2,000
Mill's and Blair's Creeks and Dam	Waterloo and Wellington	25,000
Bickle's Creek	Waterloo	5,000
Bowman's Creek	"	10,000
Haysville Stream	"	10,000
Philipsburg Stream	"	10,000
Spring Creek and Pond	"	15,000
Krampean's Pond	"	10,000
McNally's Creek	"	5,000
Wilkes Creek	"	2,500
Millgrove Creek	Wentworth	10,000
Grindstone Creek	"	5,000
Beverley Creek	"	10,000
Little Saugeen	Wellington	10,000
Eden Mills	"	10,000
Total		1,147,500

Salmon Trout Fry and Fingerlings

Waters	County	Quantity
Lake Nipigon	Thunder Bay	110,400

Pickerel

Waters	County	Quantity
Lake Deschene	Carleton	100,000
Ottawa River	"	100,000
Rideau River	"	500,000
Scugog Lake	Durham	200,000
Sharbot Lake	Frontenac	100,000
Eagle Lake	"	100,000
Loborough Lake	"	200,000
Lake Mossonoga	"	100,000
Second Depot Lake	"	100,000
Mountain Lake	Grey	100,000
Lake Charles	"	500,000
Nation River	Grenville	100,000
Stoco Lake	Hastings	200,000
Crow Lake	"	100,000
Oak Hill Lake	"	100,000
Beaver Creek	"	50,000
Deer River	"	50,000
Moira River	"	300,000
Wolfe Lake	"	100,000
Fraser Lake	"	100,000
Moira Lake	"	300,000
Paudash Lake	"	100,000
Indian Creek	Lanark	100,000

WATERS STOCKED

QUANTITIES AND KINDS OF FISH PLANTED IN 1921—*Continued.*

Pickerel

Waters	County	Quantity
White Lake	Lanark	100,000
Otty Lake	"	100,000
Christie Lake	"	100,000
Clyde River	"	200,000
Charleston Lake	Leeds	1,000,000
Rideau Lakes	Leeds and Lanark	700,000
Sand Lake	Leeds	100,000
Killenback Lake	"	100,000
Higley Lake	"	100,000
Mud Lake	"	100,000
Lake Elida	"	100,000
Thames River and tributaries	Middlesex	500,000
Aux Sauble River	"	100,000
Muskoka Lake	Muskoka	900,000
Lake Joseph	"	900,000
Lake of Bays	"	500,000
Lake Rosseau	"	900,000
Sparrow Lake	"	500,000
Long Lake	"	100,000
Log Lake	"	100,000
Lake Nipissing	Nipissing	900,000
Lake Erie	Norfolk	11,025,000
Crow Bay	Northumberland	50,000
Trent River	"	50,000
Coal Creek	"	100,000
Beaver River	Ontario	100,000
Mill Lake	Parry Sound	100,000
Magnetawan River	" "	50,000
Ahmic Lake	" "	50,000
Bear Lake	" "	100,000
Canoe Lake	Parry Sound	50,000
Wolf Lake	" "	25,000
Loon Lake	" "	25,000
Shanty Lake	" "	100,000
Stoney Lake	Peterborough	200,000
Round Lake	"	100,000
Lake Dore	Renfrew	200,000
Bass Lake	Simcoe	100,000
Severn River	"	800,000
Clear Lake	Sudbury	120,000
Crabb Lake	"	140,000
Geneva Lake	"	140,000
Paradise Lake	Waterloo	100,000
Lake Ontario	Wentworth, York, Halton and Lincoln	1,000,000
Sturgeon Lake	Victoria	200,000
Lake Simcoe and Brough's Creek and Narrows at Atherley	York, Simcoe and Ontario	900,000
Total		27,625,000

Whitefish

Waters	County	Quantity
Lake Wabigoon	Kenora	1,000,000
Lake Erie	Norfolk	40,000,000
Elbow Lake	Rainy River	1,000,000
Rainy Lake	" "	17,950,000

WATERS STOCKED

QUANTITIES AND KINDS OF FISH PLANTED IN 1921.—*Continued.*

Whitefish

Waters	County	Quantity
Little Turtle Lake	" "	1,000,000
Mink Lake	" "	1,000,000
Crooked Lake	" "	1,000,000
Lake Nipigon	Thunder Bay	27,000,000
Kashabowie Lake	" "	1,000,000
Lake Shebandawan	" "	1,000,000
Long Lake	" "	1,000,000
Whitefish Lake	" "	1,000,000
Little Long Lake	" "	1,000,000
Savanne Lake	" "	1,000,000
Lake Ontario	Wentworth, York, Halton and Lincoln	20,000,000
Total		115,950,000

Herring

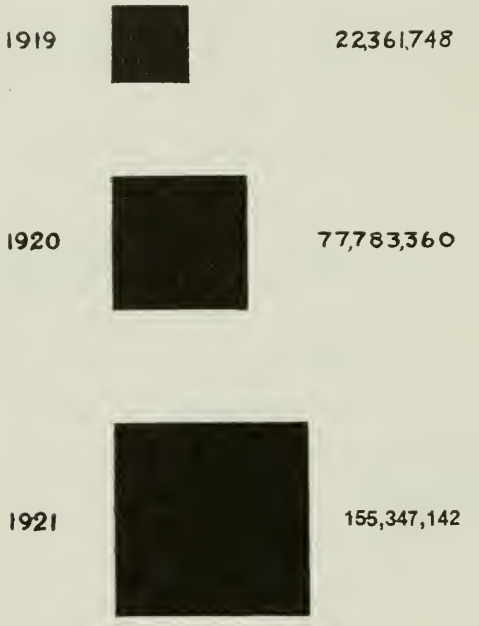
Waters	County	Quantity
Lake Erie	Norfolk	7,740,000
Lake Ontario	Wentworth, York, Halton and Lincoln	2,000,000
Total		9,740,000

SUMMARY

Black Bass Fry and Fingerlings	773,500
Parent Black Bass	742
Speckled Trout Fry and Fingerlings	1,147,500
Salmon Trout Fry and Fingerlings	110,400
Pickerel	27,625,000
Whitefish	115,950,000
Herring	9,740,000
Total distribution	155,347,142

COMPARATIVE STATEMENT OF DISTRIBUTION

	1919	1920	1921
Black Bass Fry and Fingerlings	200,500	427,200	773,500
Parent Black Bass	548	460	742
Speckled Trout Fry and Fingerlings	20,600	286,700	1,147,500
Salmon Trout Fry and Fingerlings	1,050,100	1,334,000	110,400
Pickerel	2,550,000	31,480,000	27,625,000
Whitefish	7,740,000	43,335,000	115,950,000
Herring	10,800,000	920,000	9,740,000
	22,361,748	77,783,360	155,347,142



ONTARIO

Return of the number of fishermen, tonnage and value of tugs, vessels and boats, the industry during the year 1920, in the Public

	Districts	Fishing material											
		Tugs				Gasoline Launches			Sail or Row Boats			Gill-Nets	
		No.	Tonnage	Value	Men	No.	Value	Men	No	Value	Men	Yards	Value
	Kenora and Rainy River.			$			$			$			$
1	Lake of the Woods	2	42	9,000	2	41	15,650	65	42	2,947	12	51,090	10,248
2	Rainy Lake	1	5	500	3	30	16,500	47	28	1,675	13	47,000	9,227
3	Obabican, Lower Manitou, Shoal and Eagle	2	18	1,700	4	9	5,500	16	9	315	....	15,500	2,950
4	tormy, Rowan, Big Sandy and Indian	....	....	....	....	7	2,600	7	1	150	....	9,300	1,850
5	Feegan, Dogtooth, Bear and Long	....	....	....	....	4	1,500	3	1	15	1	6,800	1,470
6	Wabigoon, Orang Outang, Dryberry and Harris	....	....	....	....	3	1,300	5	1	30	2	4,950	1,000
7	Minnetakie, Big Sea Daniels, Kawæogama, Vermillon and Seul	....	....	....	....	7	4,450	7	5	490	6	19,100	3,360
8	Rock, Pelican, Bays, Abraham, Scugonaga and McKenzie	....	....	....	....	2	500	3	5	300	7	7,300	1,390
9	Stanzhikina, Sturgeon, Lost and Jackfish	....	....	....	....	....	....	....	2	300	3	4,400	644
10	Six Mile, Loon, Kaiarskons, Turtle, Big Saw Mill and Pipestone	....	....	....	....	1	50	....	7	560	13	10,900	2,500
11	Mannican, Clearwater Trout White Otter, Mainsville, Sam Weller and Vista	....	....	....	....	2	1,600	6	4	210	2	15,500	3,725
12	Sanford, Pickerel, Manitou, Jackfish, Dogfly, Mink and Black Sturgeon	....	....	....	....	1	150	2	3	200	3	10,200	1,955
	Totals	5	65	11,200	9	107	49,800	161	108	7,192	62	202,040	40,319

Return of the kinds, quantities and values of fish caught

	Districts	Herring, salted	Herring, fresh	Whitefish, salted	Whitefish, fresh	Trout, salted	Trout, fresh	Pike	Pickerel, or Dore
	Kenora and Rainy River District	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
	Lake of the Woods			319,400	95,291		10,657	203,108	250,206
1	Rainy Lake				31,572		2,800	120,225	149,597
2	Obabican, Lower Manitou, Shoal and Eagle				80,710		15,473	53,473	84,062
3	Stormy, Rowan, Big Sandy and Indian				46,843		23,600	3,862	6,389
4	Feegan, Dogtooth, Bear and Long				5,602		7,392	924	1,323
5	Wabigoon, Orang Outang, Dryberry and Harris				12,712		3,770	4,772	6,922
6	Minnetikie, Big Sea, Daniels, Kawæogama, Vermillon and Seul				24,980		9,478	10,917	44,887
7	Rock, Pelican, Bays, Abraham, Minnitike Scugonaga and McKenzie				20,600		1,100	3,350	11,700
8	Stanzhikina, Sturgeon, Lost and Jackfish				15,275		2,307	7,890	13,188
9	Six Mile, Loon, Kaiarskons, Turtle, Big Saw Mill and Pipestone				14,105		6,578	9,413	37,332
10	Mannican, Clearwater, Trout, White Otter, Mainville, Sam Weller and Vista				31,356		22,180	18,525	26,515
11	Sanford Pickerel, Manitou, Jackfish, Dogfly, Mink and Black Sturgeon				19,069		17,897	12,998	16,923
12	Totol			319,400	398,115		123,232	449,457	649,044
	Values	$ c.	$ c.	$ c. 31,940 00	$ c. 39,811 50	$ c.	$ c. 12,323 20	$ c. 22,472 85	$ c. 64,904 40

FISHERIES.

quantity and value of all fishing materials and other fixtures employed in the fishing Waters of Kenora and Rainy River Districts.

Fishing material													Other fixtures used in fishing.			
Seines			Pound Nets		Hoop Nets		Dip or Roll Nets		Night Lines		Spears		Freezers and Ice Houses		Piers and Wharves	
No.	Yards	Value	No.	Value	No.	Value	No.	Value	No. Hooks	Value	No.	Value	No.	Value	No.	Value
		$		$		$		$		$		$		$		$
			30	6,500	26	1,220							25	9,210	26	6,215
			25	10,885									23	7,250	22	4,385
					9	350							7	1,990	8	1,350
													5	500	2	150
													3	300	1	100
													3	350	1	100
													9	2,300	6	125
													5	750	3	1,275
													1	75	2	50
													3	625	1	50
			7	3,000									1	300		
													2	350		
			62	20,385	35	1,570							87	24,000	72	13,800

during the year 1920, in the Public Waters of Kenora and Rainy River Districts.

Sturgeon	Eels	Perch	Tullibee	Catfish	Carp	Mixed and coarse fish	Caviare	Sturgeon Bladders	Pickerel (Blue)	Value
lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	No.	lbs.	$ c.
			49,094	51,842	9,441	24,403				86,157 56
7,480		11,029	54,518			125,246	379	598		34,946 99
			2,177	1,150		3,000				21,040 77
			4,375			2,300				8,230 80
										1,477 90
			820			1,000				2,668 20
			2,417			800				8,657 37
			2,100			3,000				3,753 50
			3,768							3,697 58
230		673	2,000			13,590				7,017 19
1,620		575	5,164			15,352			5,316	1,414 63
			2,997			2,518				6,319 34
9,330		12,277	129,430	52,992	9,441	191,209	379	198	5,316	194,381 83
$ c. 1,119 60	$ c.	$ c. 982 16	$ c. 7,765 80	$ c. 4,239 36	$ c. 377 64	$ c. 7,648 36	$ 379 00	$ 99	$ 318 96	$ c. 194,381 83

ONTARIO

Return of the number of fishermen, tonnage and value of tugs, vessels and boats, fishing industry during the year 1920,

	Districts	Fishing material											
		Tugs				Gasoline Launches			Sail or Row Boats			Gill-Nets	
		No.	Tonnage	Value	Men	No.	Value	Men	No.	Value	Men	Yards	Value
	Lake Superior			$			$			$			$
1	Thunder Bay	6	292	24,000	79	8	4,800	17	11	1,370	15	287,460	22,445
2	Pigeon River to Sturgeon Pt. Whitefish and Sand Lakes	....	.....	.....	..	1	1,000	1	4	180	5	3,650	1,020
3	Black Bay Pt., Pt. Magnet Pine and Arrow Lakes	1	28	7,500	3	5	3,050	8	8	880	8	38,100	6,185
4	Evelyn, Lamb, Spar and Shaganash Islands	....	.....	.....	....	1	300	....	3	370	4	7,500	1,400
5	Rossport, Pays Platte Bay and Wilson Island	3	47	9,000	8	4	2,500	2	6	495	3	40,500	12,400
6	Jackfish, Pt Caldwell, McKay and Twin Lakes	2	62	7,000	6	1	150	1	1	50	1	68,000	6,800
7	Kashabowie, Sturgeon, Heathcote, Shebandowan Head and Greenwater Lakes	....	.....	.....	....	.....	.....	.....	3	110	5	4,200	573
8	Lake Nipigon	9	221½	33,000	57	6	9,600	17	1	120	....	119,330	26,255
9	Gros Cap, Goulais Bay and Wana Lake	....	.....	.....	....	7	2,200	17	6	275	10	33,800	3,025
10	Batchawana Bay, Parisienne and Sandy Island	....	.....	.....	....	3	4,700	8	5	215	7	10,130	510
11	Gargantua and Mamainse Point	1	36	7,000	5	3	2,100	11	1	75	2	18,400	11,600
12	Michipicoten and Richardson's Harbour	4	107½	22,000	36	1	400	1	1	75	2	129,500	14,260
	Totals	26	794	109,500	194	40	30,800	83	50	4,215	62	760,570	106,475

Return of the kinds, quantities and values of fish caught

	Districts	Herring, Salted	Herring, Fresh	Whitefish, salted	Whitefish, fresh	Trout, salted	Trout, fresh	Pike	Pickerel, or Dore
	Lake Superior	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
1	Thunder Bay	497,401	1,104,270	.....	61,911	5,300	158,511	625	3,229
2	Pigeon River to Sturgeon Pt. and Whitefish Lake	.....	8,000	.....	23,682	.....	600	2,485	.....
3 4	B'ack Bay and Point Magnet Pine and Arrow Lakes	.....	3,340	.....	55,081	23,600	52,195	3,571	55,078
5	Evelyn, Lamb, Spar and Shaganash Islands	.....	.....	.....	600	300	18,160	45	500
6	Rossport, Pays, Platte Bay and Wilson Island	118,800	141,600	200	38,866	5,000	206,892	.....	.....
7	Jackfish, Pt. Coldwell, McKay and Twin Lakes	.....	5,722	.....	2,193	700	20,911	827	1,870
8	Kashabowie, Sturgeon, Heathcote, Shebandowan Head and Greenwater Lakes	.....	.....	.....	2,157	.....	500	1,356	3,495
9	Lake Nipigon	.....	.....	.....	1,399,390	.....	369,675	3,605	35,525
10	Gros Cap, Goulais Bay and Wana Lake	400	6,400	.....	42,950	200	51,525	500	200
11	Batchawana Bay, Parisienne and Sandy Island	.....	700	.....	45,680	.....	32,805	956	14,899
12	Gargantau and Mamainse Point	.....	16,921	.....	4,262	60	130,632	1,301	3,983
	Michipicoten and Richardson's Harbour	.....	.....	.....	27,961	110,000	290,022	.....	.....
	Totals	616,601	1,286,953	200	1,704,733	145,700	1,332,428	15,271	118,779
	Values	$ c. 30,830 05	$ c. 64,347 65	$ c. 20,00	$ c. 170,473 30	$ c. 14,570 00	$ c. 133,242 80	$ c. 763 55	$ c. 11,877 90

FISHERIES

the quantity and value of all fishing materials and other fixtures employed in the in the Public Waters of Lake Superior.

Fishing material													Other fixtures used in fishing			
Seines			Pound Nets		Hoop Nets		Dip or Roll Nets		Night Lines		Spears		Freezers and Ice Houses		Piers and Wharves	
No.	Yards	Value	No.	Value	No.	Value	No.	Value	No. Hooks	Value	No.	Value	No.	Value	No.	Value
		$		$		$		$		$		$		$		$
													7	5,220	6	2,000
					1	60							1	200	1	600
			11	8,300									4	1,210	4	870
			6	1,800												
			1	200									4	1,650	2	1,000
													1	100	2	15
			10	6,000									1	500	1	200
			5	5,000									3	175	3	750
			14	13,000					1,300	80			2	2,500	2	1,300
									1,300	100			1	300	1	500
			8	4,000									5	3,150	3	2,000
			55	38,300	1	60			2,600	180			29	15,005	25	9,235

during the year 1920, in the Public Waters of Lake Superior

Sturgeon	Eels	Perch	Tullibee	Catfish	Carp	Mixed and coarse fish	Caviare	Sturgeon Bladders	Pickerel (Blue)	Value
lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	No.	lbs.	$ c.
						58,917				105,366 58
						4,932				3,149 73
627	20,496					41,750			7,267	23,171 81
										1,958 25
						200				38,123 80
805							22			3,013 45
			50			1,700				754 00
20995							145			183,303 65
300						1,000				9,928 50
7,880						6,425	35			10,658 80
										14,858 80
										42,798 30
30,607	20,496		50			114,924	202		7,267	437,085 67
$ c. 3,672 84	$ c. 2,049 60	$ c.	$ c. 300	$ c.	$ c.	$ c. 4,5[illegible]6 96	$ c. 202 00		$ c. 436 02	$ c. 437,085 67

ONTARIO

Return of the number of fishermen, tonnage and value of tugs, vessels and boats, fishing industry during the year 1920,

	Districts	Fishing material											
		Tugs				Gasoline Launches			Sail or Row Boats			Gill-Nets	
		No.	Tonnage	Value	Men	No.	Value	Men	No.	Value	Men	Yards	Value
	North Channel, Lake Huron			$			$			$			$
1	Thessalon	1	26½	7,000	4	7	3,600	15	13	660	11	25,200	2,053
2	Spanish, St. Joseph Isles and Spragge	1	27½	4,500	3	5	1,700	8	15	1,230	18	19,200	3,900
3	Bruce Mines, Algoma Mills, Buswell's Pt and McKinnon	1	16	3,000	3	5	2,600	14	7	305	8	12,300	2,505
4	Little Detroit Fitzwilliam, Squaw and Duck Islands	6	142	39,200	33	4	1,700	8	1	50	2	272,400	45,000
5	South Bay, Kagawong and Little Current	3	56	10,000	12	3	1,650	8	6	620	10	68,800	18,547
6	Killarney	1	20	4,000	4	9	4,550	20	4	485	6	28,500	1,950
7	Meldrum, Providence, Sheguindah and Gore Bay	5	184	36,500	25	1	300	4	4	420	5	149,500	14,750
8	Manitowaning, Mississauga, Tamarack Cove and Berry Islands	1	29½	8,000	6	3	1,625	10	1	100	2	61,000	8,240
9	Bedford and Cockburn Islands and Manitou	1	29½	8,000	6	3	400	6	1	50	2	69,000	8,950
	Totals	20	531	120,200	96	40	18,125	93	52	3,920	64	705,900	105,895

Return of the kinds, quantities and values of the fish caught during

	Districts	Herring, salted	Herring, fresh	Whitefish, salted	Whitefish, fresh	Trout, salted	Trout, fresh	Pike	Pickerel or Dore
	North Channel, Lake Huron	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
1	Thessalon	.....	6,076	.....	158,461	.....	62,839	13,894	74,809
2	Spanish, St. Joseph Islands and Spragge	.....	6,948	.....	5,330	.....	15,172	17,101	42,534
3	Bruce Mines, Algoma Mills, Buswells Pt. and McKinnon	35	2,548	175	14,601	50	13,919	10,513	47,698
4	Little Detro t, Fitzwilliam, Squaw and Duck Islands	.....	.....	.....	92,203	.....	272,985	.....	1,778
5	South Bay, Kagawong and Little Current	.....	.....	300	46,159	912	265,562	4,741	42,457
6	Killarney	.....	.....	.....	366,131	5	84,379	17,972	10,167
7	Meldrum, Providence, Sheguiandah and Gore Bay	120	8,601	77	126,583	.....	205,441	2,243	14,624
8	Manitowaning, Mississauga, Tamarack Cove and Berry Is.	.....	.....	.....	70,133	.....	99,420	658	5,210
9	Bedford and Cockburn Islands and Manitou	.....	.....	.....	23,102	.....	88,054	1,378	2,725
	Totals	155	24,173	552	902,703	967	1,107,771	68,500	242,003
	Values	$ c. 775	$ c. 1,208 65	$ c. 55 20	$ c. 90,270 30	$ c. 96 70	$ c. 110,777 10	$ c. 3,425 00	$ c. 24,200 30

FISHERIES

the quality and value of all fishing material and other fixtures employed in the
in the Public Waters of North Channel

Fishing material													Other fixtures used in fishing			
Seines			Pound Nets		Hoop Nets		Dip or Roll Nets		Night Lines		Spears		Freezers and Ice Houses		Piers and Wharves	
No.	Yards	Value	No.	Value	No.	Value	No.	Value	No. Hooks	Value	No.	Value	No.	Value	No.	Value
		$		$		$		$	$	$		$		$		$
....	.....	.....	33	15,200	.....	.....	.....	.....	.....	.....	.....	.....	7	2,650	8	3,000
....	.....	.....	18	8,150	2	300	.....	.....	.....	.....	.....	.....	7	820	3	750
....	.....	.....	19	8,100	5	250	.....	.....	.....	.....	.....	.....	5	930	2	1,500
....	.....	.....	21	23,500	.....	.....	.....	.....	.....	.....	.....	.....	2	1,500	2	9,500
....	.....	.....	13	9,000	.....	.....	.....	.....	.....	.....	.....	.....	2	1,000	3	1,000
....	.....	.....	31	26,800	.....	.....	.....	.....	.....	.....	.....	.....	1	100	1	1,000
....	.....	.....	33	22,400	.....	.....	.....	.....	.....	.....	.....	.....	5	2,000	5	5,100
....	.....	.....	12	6,000	.....	.....	.....	.....	.....	.....	.....	.....	1	700	1	300
....	.....	.....	7	4,500	.....	.....	.....	.....	.....	.....	.....	.....	1	200	1	400
....	.....	.....	187	123,650	7	550	.....	.....	.....	.....	.....	.....	31	9,900	26	22,550

the year 1920, in the Public Waters of North Channel, Lake Huron.

Sturgeon	Eels	Perch	Tullibee	Catfish	Carp	Mixed and Coarse fish	Caviare	Sturgeon Bladders	Pickerel (Blue)	Value
lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	No.	lbs.	$ c.
3,877	.....	1,774	.....	.....	14,099	121,878	94	.....	.....	36,749 64
1,451	.....	577	.....	.....	1,430	88,119	37	.....	.....	11,345 29
2,539	.....	740	.....	135	1,644	48,202	.....	.....	.....	10,667 72
.....	.....	.....	.....	.....	.....	2,235	.....	.....	.....	36,786 00
3,208	.....	3,369	20,712	.....	.....	28,115	7	.....	.....	38,804 85
.....	.....	350	.....	1,595	40	4,145	.....	.....	.....	47,289 80
1,434	.....	799	.....	.....	.....	81,559	.....	.....	.....	38,719 06
245	.....	338	.....	.....	.....	40,494	.....	.....	.....	19,185 40
1,050	.....	468	.....	.....	.....	6,044	.....	.....	.....	11,862 20
13,804	.....	8,415	20,712	1,730	17,213	420,791	138	.....	.....	251,409 96
$ c. 1,656 48	$	$ c. 673 20	$ c 1,242 72	$ c. 138 40	$ c. 688 52	$ c. 16,831 64	$ 138	$	$ c.	$ c. 251,409 96

ONTARIO

Return of the number of fishermen, tonnage and value of tugs, vessels and boats, the industry during the year 1920

	Districts	Fishing material											
		Tugs				Gasoline Launches			Sail or Row Boats			Gill-Nets	
		No.	Tonnage	Value	Men	No.	Value	Men	No.	Value	Men	Yards	Value
	Georgian Bay			$			$			$			$
1	Parry Sound	5	165	33,000	23	13	11,800	23	12	1,220	19	345,000	48,910
2	Simcoe and Muskoka	2	48	12,000	10	13	5,275	23	28	1,830	39	199,500	19,256
3	Grey County	5	139	28,000	22	31	18,845	62	11	575	12	345,300	29,305
4	Bruce County	3	55	8,300	10	19	16,850	41	34	2,050	43	121,500	11,195
	Totals	15	407	81,300	65	76	52,770	149	85	5,675	113	1,011,300	108,666

Returns of the kinds, quantities and values of fish caught

	Districts.	Herring, salted	Herring, fresh	Whitefish, salted	Whitefish, fresh	Trout, salted	Trout, fresh	Pike	Pickerel, or Dore
	Georgian Bay	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
1	Parry Sound	.....	1,900	2,300	376,464	650	200,112	31,609	58,233
2	Simcoe and Muskok..	400	24,221	3,300	48,022	3,250	130,617	12,529	7,800
3	Grey County	.....	11,211	.....	1,590	6,850	374,866	.....	.....
4	Bruce County	3,250	11,950	300	19,275	7,650	266,563	26	274
	Totals	3,650	49,282	5,900	445,351	18,400	972,158	44,164	67,307
	Values	$ c. 182 50	$ c. 2,464 10	$ c. 590 00	$ c. 44,535 10	$ c. 1,840 00	$ c. 97,215 80	$ c. 2,20 20	$ c. 7,730, 70

FISHERIES

quantity and value of all fishing materials and other fixtures employed in the in the public waters of Georgian Bay

Fishing material													Other fixtures used in fishing			
Seines			Pound Nets		Hoop Nets		Dip or Roll Nets		Night Lines		Spears		Freezers and Ice Houses		Piers and Wharves	
No.	Yards	Value	No.	Value	No.	Value	No.	Value	No. Hooks	Value	No.	Value	No.	Value	No.	Value
		$		$		$		$		$		$		$		$
.....	.....	.....	15	14,600	.....	.....	.....	.....	2,300	160	.....	.....	6	6,800	7	4,300
10	810	725	.....	.....	28	765	.....	.....	5,300	280	.....	.....	7	1,400	4	1,820
.....	.....	.....	.....	.....	.....	.....	.....	.....	12,400	2,825	.....	.....	10	1,500	9	1,750
..	.....	.....	8	4,900	.....	.....	.....	.....	8,800	1,240	..	.....	8	1,400	8	1,100
10	810	725	23	19,500	28	765	.....	.....	28,800	4,505	.....	.....	31	11,100	28	8,970

during the year 1920, in the Public Waters of Georgian Bay.

Sturgeon	Eels	Perch	Tullibee	Catfish	Carp	Mixed and course fish	Caviare	Sturgeon Bladders	Pickerel (Blue)	Value
lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	No.	lbs.	$ c.
1,425	.....	200	.....	75	.....	8,000	30	.....	.....	66,094 35
1,230	.....	3,798	2,150	2,340	54,319	32,883	.....	.....	.....	25,412 12
.....	.....	100	12,000	.....	.....	.....	.....	.....	.....	39,619 15
.....	.....	.....	62,124	.....	.....	2,500	.....	.....	.....	33,994 94
2,655	.....	4,098	76,274	2,415	54,319	43,383	30	.....	.....	165,120 56
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$	$	$ c.	$ c.
318 60	.....	327 84	4,576 44	193 20	2,172 76	1,735 32	30	.....	.....	165,120 56

ONTARIO

Return of the number of fishermen, tonnage and value of tugs, vessels and boats, fishing industry during the year 1920,

	Districts	Fishing material											
		Tugs				Gasoline Launches			Sail or Row Boats			Gill-Nets	
		No.	Tonnage	Value	Men	No.	Value	Men	No.	Value	Men	Yards	Value
	Lake Huron (Proper)			$			$			$			$
1	Bruce County	8	174	36,500	44	18	13,500	43	14	1,800	19	277,335	46,650
2	Huron County	....	.....	.....	....	9	8,100	20	5	590	13	62,740	9,020
3	Lambton Co., including River St. Clair	....	.....	.....	....	23	9,650	39	21	870	29	.....	.....
	Totals	8	174	36,500	44	50	31,250	102	40	3,260	61	340,075	55,670

Return of the kinds, quantities and values of fish caught

	Districts	Herring, Salted	Herring, Fresh	Whitefish, salted	Whitefish, fresh	Trout, salted	Trout, fresh	Pike	Pickerel, or Dore
	Lake Huron (Proper)	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
1	Bruce County	6,700	35,478	900	41,056	55,850	664,454	1,651	264
2	Huron County	.....	35,900	.....	5,700	1,000	116,100	.....	15,700
3	Lambton Co. (including River St. Clair)	1,000	101,252	.....	35,438	.....	9,614	3,344	123,770
	Totals	7,700	172,630	900	82,194	56,850	790,168	4,995	139,634
	Values	$ c. 385 00	$ c. 8,631 50	$ c. 90 00	$ c. 8,219 40	$ c. 5,685 00	$ c. 79,016 80	$ c. 249 75	$ c. 13,963 40

FISHERIES

the quantity and value of all fishing materials and other fixtures employed in the
in the public waters of Lake Huron (proper)

Fishing material													Other fixtures used in fishing			
Seines			Pound Nets		Hoop Nets		Dip or Roll Nets		Night Lines		Spears		Freezers and Ice Houses		Piers and Wharves.	
No.	Yards	Value	No.	Value	No.	Value	No.	Value	No. Hooks	Value	No.	Value	No.	Value	No.	Value
		$		$		$		$		$		$		$		$
....	.....	.....	2	600	....	.....	....	.....	2,100	175	....	.....	11	4,490	6	875
....	.....	.....	10	4,800	....	.....	....	.....	.....	.....	....	.....	10	3,300	7	425
7	605	710	57	35,150	2	150	2	10	200	15	....	.....	9	2,850	2	800
7	605	710	69	40,550	2	150	2	10	2,300	190	....	.....	30	10,640	15	2,100

during the year 1920, in the Public Waters of Lake Huron (Proper)

Sturgeon	Eels	Perch	Tullibee	Catfish	Carp	Mixed and Coarse fish	Caviare	Sturgeon Bladders	Pickerel (Blue)	Value
lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	No.	lbs.	$ c
30	.....	1,600	193,146	.....	.....	7,625	12....	....	.....	90,481 21
1,200	.....	119,097	12,883	.....	.....	26,459	71....	....	.....	27,219 10
7,946	.....	8,460	.....	227	3,988	64,972	566...		2,176	27,255 44
9,176	.....	129,157	206,029	227	3,988	99,056	649....		2,176	144,955 75
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$	$ c.	$ c.
1,101 12	.....	10,332 56	12,361 74	18 16	159 52	3,962 24	649 00		130 56	144,955 75

ONTARIO

Return of the number of fishermen, tonnage and value of tugs, vessels and boats fishing industry during the year 1920

	Districts	Fishing material											
		Tugs				Gasoline Launches			Sail or Row Boats			Gill-Nets	
		No.	Tonnage	Value	Men	No.	Value	Men	No.	Value	Men	Yards	Value
	Lake St. Clair, etc.			$			$			$			$
1	Kent Co. (including River Thames)	....	.....	.....	....	34	14,800	48	48	2,725	73	.....	.....
2	Essex County	....	.....	.....	....	4	7,245	37	30	1,970	30	.....	.....
3	Detroit River	....	.....	.....	....	24	2,150	15	17	580	34	.....	.....
	Totals	....	.....	.....	....	62	24,195	100	95	5,275	137	.....	.....

Return of the kinds, quantities and values of fish caugh

	Districts.	Herring, salted	Herring, fresh	Whitefish, salted	Whitefish, fresh	Trout, salted	Trout, fresh	Pike	Pickerel, or Dore
	Lake St. Clair, etc.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
1	Kent County, (including River Thames)	.....	.....	.....	.....	.....	.....	74,429	12,640
2	Essex County	.....	400	.....	3,127	.....	.....	28,512	13,603
3	Detroit River	.....	.....	.....	4,200	.....	.....	4,635	725
	Totals	.....	400	.....	7,327	.....	.....	107,576	26,968
		$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
	Values	.....	20 00	.....	732 70	.....	.....	5,378 80	2,696 80

FISHERIES

the quantity and value of all fishing materials and other fixtures employed in the in the Public Waters of Lake St. Clair, etc.

Fishing material													Other fixtures used in fishing			
Seines			Pound Nets		Hoop Nets		Dip or Roll Nets		Night Lines		Spears		Freezers and Ice Houses		Piers and Wharves	
No.	Yards	Value	No.	Value	No.	Valu	No.	Value	No. Hooks	Value	No.	Value	No.	Value	No.	Value
		$		$		$		$		$		$		$		$
30	4,971	4,295	8	2,000	148	29,400	1	10	800	20..	....	.....	29	7,650	10	3,550
8	2,225	1,350	6	2,400	81	10,450	....	.....	600	60..	....	.....	15	6,775	....	.....
17	2,055	2,345	....	.....	.....	.....	....	.....	200	50..	....	.....	....	.....	....	.....
55	9,251	7,990	14	4,400	229	39,850	1	10	1,600	1 30..	....	.....	44	14,425	10	3,550

during the year 1920, in the Public Waters of Lake St. Clair, etc.

Sturgeon	Eels	Perch	Tullibee	Catfish	Carp	Mixed and coarse fish	Caviare	Sturgeon Bladders	Pickerel (Blue)	Value
bs.	lbs.	lbs.	bs.	lbs.	lbs.	lbs.	lbs.	No.	lbs.	$ c.
.....	.....	133,111	.....	60,105	274,599	419,608	.....	....	400	48,235 01
12,704	.....	98,110	.....	80,817	78,438	164,878	526	....	.....	29 215 88
300	.....	400	.....	325	42,400	18,650	.....	....	.....	3,260 25
13,004	.....	231,621	.....	141,247	395,437	603,136	526	....	400	80,711 14
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$	$	$ c.	$ c.
1,560 48	.....	18,529 68	.....	11,299 76	15,817 48	24,125 44	526	....	24 00	80,711 14

ONTARIO

Return of the number of fishermen, tonnage and value of tugs, vessels and boats, the fishing industry during the year 1920,

	Districts	Fishing material											
		Tugs				Gasoline Launches			Sail or Row Boats			Gill-Nets	
		No.	Tonnage	Value	Men	No.	Value	Men	No.	Value	Men	Yards	Value
	Lake Erie			$			$			$			$
1	Essex County	2	91	26,000	12	45	46,000	87	32	2,385	36	140,300	31,050
2	Kent County	6	72	25,300	18	48	36,450	125	31	2,505	35	63,800	8,225
3	Elgin County	22	862	189,357	139	26	18,900	80	24	1,190	19	577,800	76,790
4	Norfolk County	12	417	124,500	76	27	16,960	81	42	2,520	64	365,100	49,675
5	Haldimand County (including Grand River)	8	211	54,000	38	18	9,900	48	38	3,165	41	243,500	33,670
6	Welland County (including Upper Niagara River)	....	.....	.....	....	2	2,300	8	18	1,110	20	12,100	1,450
	Totals	50	1,653	419,157	283	166	130,510	429	185	12,875	215	1,402,600	200,860

Return of the kinds, quantities and values of fish caught

	Districts	Herring, salted	Herring, fresh	Whitefish, salted	Whitefish, fresh	Trout, salted	Trout, fresh	Pike	Pickerel, or Dore
	Lake Erie	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
1	Essex County	.....	186,421	20,000	284,744	.....	.....	1,020	75,870
2	Kent County	.....	1,091,145	.....	68,632	.....	45	32,368	43,497
3	Elgin County	.....	4,119,648	.....	82,001	.....	.....	12,284	23,021
4	Norfolk County	.....	2,301,103	.....	141,719	.....	722	63,788	8,995
5	Haldimand County (including Grand River	.....	1,907,191	.....	234,953	.....	277	549	8,891
6	Welland County (including Upper Niagara River)	.....	45,776	.....	6,255	.....	.....	5,250	5,739
	Totals	.....	9,651,284	20,000	818,304	.....	1,044	115,259	166,013
	Value	.....	$ c. 482,564 20	$ c. 2,000 00	$ c. 81,830 40	.....	$ c. 104,40	$ c. 5,762 9	$ c. 16,601 30

FISHERIES

quantity and value of all fishing materials and other fixtures employed in the in the Public Waters of Lake Erie.

Fishing material													Other fixtures used in fishing			
Seines			Pound Nets		Hoop Nets		Dip or Roll Nets		Night Lines		Spears		Freezers and Ice Houses		Piers and Wharves	
No.	Yards	Value	No.	Value	No.	Value	No.	Value	No. Hooks	Value	No.	Value	No.	Value	No.	Value
		$		$		$		$		$		$		$		$
8	1,725	2,200	211	147,000	1	25	1	5	500	10	.....	.....	27	26,600	11	5,500
7	2,475	1,350	223	200,850	.....	.....	.....	.....	.....	.....	.....	.....	34	50,550	21	9,900
.....	.....	.....	129	127,000	.....	.....	5	75	900	20	.....	.....	25	22,050	14	6,660
31	12,050	10,025	18	8,000	25	670	.....	.....	.....	.....	.....	.....	16	17,535	14	5,450
6	885	640	50	31,950	.....	.....	12	90	.....	.....	.....	.....	9	4,300	3	1,050
1	150	60	6	3,000	.....	.....	1	15	5,700	165	.....	.....	2	250	.....	.....
53	17,285	14,275	637	517,800	26	695	19	185	7,100	195	.....	.....	113	121,285	63	28,560

during the year 1920, in the Public Waters of Lake Erie.

Sturgeon	Eels	Perch	Tullibee	Catfish	Carp	Mixed and course fish	Caviare	Sturgeon Bladders	Pickerel (Blue)	Value
lbs.	lbs.	lbs.	lb	bs.	lbs	lbs.	lbs.	No.	lbs.	c.
.....	3,743	240,459	.....	8,025	87,096	451,006	.....	.....	432,990	115,189 95
.....67		486,405	.....	679	76,719	141,143	.....	.....	1,387,406	198,326 65
200	34,982	278,226	.....	7,814	2,047	32,909	.....	.....	1,208,557	317,415 86
.....	17	181,904	.....	25,265	203,194	100,008	.....	.....	115,621	169,028 71
.....	.....	67,745	.....	113	61,892	121,386	.....	.....	190,602	143,994 98
.....	.....	17,442	.....	155	916	54,039	.....	.....	19,347	8,517 48
267	38,742	1,272,181	.....	42,051	431,864	900,491	.....	.....	3,354,523	952,473 63
$ c.	$ c.	$ c.	$ c	$ c.	$ c.	$ c	$	$	$ c.	$ c.
32 04	3,874 20	101,774 48	.....	3,364 08	17,274 56	36,019 64	.....	.....	201,271 38	952,473 63

ONTARIO

Return of the number of fishermen, tonnage and value of tugs, vessels and boats, fishing industry during the year 1920,

	Districts	Fishing material											
		Tugs				Gasoline Launches			Sail or Row Boats			Gill-Nets	
		No.	Tonnage	Value	Men	No.	Value	Men	No.	Value	Men	Yards	Value
	Lake Ontario.			$			$			$			$
1	Lincoln County					21	11,200	34	6	205	18	84,550	8,460
2	Wentworth County					4	2,900	7	6	335	12	39,500	3,470
4	Halton County					12	5,600	22	3	200	4	71,000	7,590
4	Peel County					3	1,800	7	1	25	1	22,000	3,400
5	York County					10	4,575	19	5	350	3	36,800	7,785
6	Ontario County					12	4,650	21	4	220	5	53,000	6,690
7	Durham County					10	7,050	22				59,600	9,680
8	Northumberland County					11	5,400	23	15	830	25	81,660	9,375
9	Prince Edward County					64	23,591	116	115	5,505	173	360,652	39,867
10	Bay of Quinte (Proper)					52	13,595	103	103	6,013	181	158,200	22,836
11	Bay of Quinte (Eastern Channel					10	2,180	16	17	1,060	21	65,000	21,995
12	Wolfe Island and Vicinity					13	3,750	22	29	1,243	31	26,000	3,150
	Totals					222	86,291	412	304	15,986	474	1,057,962	144,298

Return of the kinds, quantities and values of fish caught

	Districts.	Herring, Salted	Herring, Fresh	Whitefish, salted	Whitefish, fresh	Trout, salted	Trout, fresh	Pike	Pickerel or Dore
	Lake Ontario.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
1	Lincoln County		98,724		51,423		11,479	100	879
2	Wentworth County		26,000		26,300		7,100	15	500
3	Halton County		79,200	1,000	26,800		36,275	100	
4	Peel	1,000	37,000		9,000		53,000		
5	York County		13,400		53,975		10,800		
6	Ontario County		500		133,527		4,765	461	
7	Durham County		1,500		211,954		15,365		
8	Northumberland Co.		29,050		188,546		37,226	28,150	
9	Prince Edward County	400	271,182	780	785,015		230,470	58,205	800
10	Bay of Quinte (Proper)	1,500	692,139	370	383,842			195,627	28,450
1	Bay of Quinte (Eastern Channel)	100	24,626		134,273	300	34,393	4,055	2,204
12	Wolfe Island and vicinity	650	14,259	800	19,403	3,050	17,790	24,719	3,718
	Totals	3,650	1,287,580	2,950	2,024,058	3,350	458,663	311,432	36,551
	Values	$ c. 182 50	$ c. 64,379 00	$ c. 295 00	$ c. 202,405 80	$ c. 335 00	$ c. 45,866 30	$ c. 15,571 60	$ c. 3,655 10

FISHERIES

the quantity and value of all fishing materials and other fixtures employed in the in the Public Waters of Lake Ontario.

Fishing material													Other fixtures used in fishing			
Seines			Pound Nets		Hoop Nets		Dip or Roll Nets		Night Lines		Spears		Freezers and Ice Houses		Piers and Wharves	
No.	Yards	Value	No.	Value	No.	Value	No.	Value	No. Hooks	Value	No.	Value	No.	Value	No.	Value
		$		$		$		$		$		$		$		$
7	690	1,650	....	.....	.....	.....	....	.....	600	23	....	....	3	1,000	....	.....
.....	.....	.....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1,000	.....	.....
1	100	75	....	.....	.....	.....	.....	.....	45	15	.....	.....	2	250	2	750
1	10	15	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	150	....	.....
1	200	180	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	.....
2	290	405	....	.....	.....	.....	1	20	.....	.....	.....	.....	4	575	....	.....
.....	.....	.....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	100	.....	.....
.....	.....	.....	....	.....	29	1,315	.....	.....	.....	.....	.....	.....	.....	.....	1	100
2	105	175	....	.....	155	5,485	.....	.....	4,520	215	.....	.....	27	3,300	3	400
....	.....	.....	....	.....	395	15,065	.....	.....	500	20	.....	.....	5	680	9	393
....	.....	.....	....	.....	8	390	.....	.....	1,200	76	....	.....	1	150	1	40
....	.....	.....	....	.....	138	5,135	.....	.....	300	15	....	.....	5	825	6	850
14	1,395	2,500	....	.....	725	27,390	1	20	7,165	364	....	.....	50	8,030	22	2,533

during the year 1920, in the Public Waters of Lake Ontario

Sturgeon	Eels	Perch	Tullibee	Catfish	Carp	Mixed and coarse fish	Caviare	Sturgeon Bladders	Pickerel (Blue)	Value
lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	No.	lbs.	$ c.
500	834	550	.....	200	6,550	12,518	338	240	8,322	13,242 74
.....	.....	1,400	.....	.....	700	1,160	.....	....	1,245	4,951 85
.....	50	95	.....	.....	8,000	200	.....	....	.....	10,713 10
.....	.....	.....	.....	.....	.....	1,025	.....	....	.....	8,141 00
.....	.....	.....	.....	.....	12,000	15,600	.....	....	.....	8,251 50
.....	.....	70	.....	428	3,292	6,400	.....	....	.....	14,304 77
.....	.....	.....	.....	.....	.....	7,000	.....	....	.....	23,086 90
.....	2,100	4,000	.....	18,692	500	29,232	.....	....	.....	28,651 84
.....	16,644	14,150	300	37,739	9,815	93,984	.....	....	.....	128,181 33
.....	49,022	62,950	.....	80,819	9,075	201,541	.....	....	250	110,572 86
.....	6,095	2,680	.....	868	780	6,470	.....	....	25	19,740 89
.....	17,187	21,488	.....	31,469	14,962	38,711	.....	....	.....	14,559 68
500	91,932	107,383	300	170,215	65,674	413,841	338	240	9,842	384,398 46
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$	$	$ c.	$ c.
60 00	9,193 20	8,590 64	18 00	13,617 20	2,626 96	16,553 64	338	120	590 52	384,398 46

ONTARIO

Return of the number of fishermen, tonnage and value of tugs, vessels and boats fishing industry during the year

	Districts.	Fishing material											
		Tugs				Gasoline Launches			Sail or Row Boats			Gill-Nets	
		No.	Tonnage	Value	Men	No.	Value	Men	No.	Value	Men	Yards	Value
	Inland Waters			$			$			$			$
1	Frontenac County					1	300	2	16	420	24		
2	Lanark and Leeds Counties					4	1,150	7	64	2,288	74		
3	Grenville, Dundas, Stormont and Glengarry Counties					3	650	5	20	400	22		
4	Prescott, Russell, Carleton and Renfrew Counties					1	15	1	20	375	27	1,030	235
5	Peterborough and Victoria Counties					7	2,500	12	15	355	21		
6	Lake Simcoe					5	3,750	18	18	625	18		
7	Lake Nipissing					6	3,700	14					
8	Temiskaming and Nipissing Districts					13	8,400	27	16	1,805	13	20,350	4,370
	Totals					40	20,465	86	169	6,268	199	21,380	4,605

Return of the kinds, quantities and values of fish

	Districts	Herring, salted	Herring, fresh	Whitefish, salted	Whitefish, fresh	Trout, salted	Trout, fresh	Pike	Pickerel, or Dore
	Inland Waters.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
1	Frontenac County							10,552	
2	Lanark and Leeds Co.							13,999	
3	Grenville, Dundas, Stormont and Glengarry Counties							1,055	
4	Prescott, Russell, Carleton and Renfrew Counties							5,710	2,040
5	Peterboro and Victoria Counties							1,450	
6	Lake Simcoe		1,970		8,200		12,960		1,100
7	Lake Nipissing		28,490		32,920			19,477	98,576
8	Temiskaming and Nipissing Districts	400	8,592		29,913	800	618	55,289	57,226
	Totals	400	39,052		71,033	800	13,578	107,532	158,942
	Values	$ c. 20 00	$ c. 1,952 60	$ c.	$ c. 7,103 30	$ c. 80 00	$ c. 1,357 80	$ c. 5,376 60	$ c. 15,894 20

FISHERIES

the quantity and value of all fishing materials and other fixtures employed in the 1920, in Inland Waters.

Fishing material													Other fixtures used in fishin			
Seines			Pound Nets		Hoop Nets		Dip or Roll Nets		Night Lines		Spears		Freezers and Ice Houses		Piers and Wharves	
No.	Yards	Value	No.	Value	No.	Value	No.	Value	No. Hooks	Value	No.	Value	No.	Value	No.	Value
		$		$		$		$		$		$		$		$
1	78	165			47	2,175										
12	314	517			179	4,855			2,765	270						
3	60	36			21	850	4	10	6,000	80						
					45	1,390			2,200	115			6	5 5		
7	520	450			29	990	2	20	600	24			4	250	1	25
6	1,400	2,500			5	100			3,200	110	122	410	1	1,500	3	900
			18	7,200									3	2,000	3	1,800
			15	3,650	63	1,750							14	7,750	7	940
29	2,372	3,468	33	10,850	389	12,110	6	30	14,765	599	122	410	28	12,035	14	3,667

caught during the year 1920, in Inland Waters

Sturgeon	Eels	Perch	Tullibee	Catfish	Carp	Mixed and course fish	Caviare	Sturgeon Bladders	Pickerel (Blue)	Value
lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs	lbs.	No	lbs.	$ c.
	4,095	3,980		27,043		28,524				4,559 90
1,075	10,570	6,625		57,845	1,035	83,789	300			10,736 51
6,670	3,350	610		6,580	775	3,185	30			1,951 75
775	2,650	8,525		12,275	1,165	27,800				3,670 10
	5,743	800		29,615	12,376	43,768				5,325 76
		3,684			115,476	36,452				8,696 34
96,800						7,891	3,152			30,631 59
4,308		5,391				49,170				14,984 79
109,628	26,408	29,615		133,358	130,827	280,579	3,482			80,556 74
$ c.	$ c.	$ c.	$ c.	$ c	$ c.	$ c.	$	$	$ c.	$ .c
13,155 36	2,640 80	2,369 20		10,668 64	5,233 08	11,223 16	3,482			80,556 74

ONTARIO

Recapitulation of the number of fishermen, tonnage and value of tugs, vessels and boats, industry during

	Disr.cts.	Fishing material											
		Tugs				Gasoline Launches			Sail or Row Boats			Gill-Nets	
		No.	Tonnage	Value	Men	No.	Value	Men	No.	Value	Men	Yards	Value
				$			$			$			$
1	Kenora and Rainy River District	5	65	11,200	9	107	49,800	161	108	7,192	62	202,040	40,319
2	Lake Superior	26	794	109,500	194	40	30,800	83	50	4,215	62	760,570	106,475
3	Lake Huron(North Channel)	20	531	120,200	96	40	18,125	93	52	3,920	64	705,900	105,895
4	Georgian Bay	15	407	81,300	65	76	52,770	149	85	5,675	113	1,011,300	108,666
5	Lake Huron (Proper)	8	174	36,500	44	50	31,250	102	40	3,260	61	340,075	55,670
6	Lake St. Clair, etc	....	....	....	....	62	24,195	100	95	5,275	137	....	....
7	Lake Erie	50	1,653	419,157	283	166	130,510	429	185	12,875	215	1,402,600	200,860
8	Lake Ontario	....	....	....	....	222	86,291	412	304	15,986	474	1,057,962	144,298
9	Inland Waters	....	....	....	....	40	20,465	86	169	6,268	199	21,380	4,605
	Totals	124	3,624	777,857	691	803	444,206	1615	1088	64,666	1387	5,501,827	766,788

Recapitulations of the kinds, quantities and values

	Districts	Herring, salted	Herring, fresh	Whitefish, salted,	Whitefish, fresh	Trout, salted	Trout, fresh	Pike	Pickerel or Dore
		lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
1	Kenora and Rainy River District	....	....	319,400	398,115	....	123,232	449,457	649,044
2	Lake Superior	616,601	1,286,953	200	1,704,733	145,700	1,332,428	15,271	118,779
3	Lake Huron (North Channel)	155	24,173	552	902,703	967	1,107,771	68,500	242,003
4	Georgian Bay	3,650	49,282	5,900	445,351	18,400	972,158	44,164	67,307
5	Lake Huron (Proper)	7,700	172,630	900	82,194	56,850	790,168	4,995	139,634
6	Lake St. Clair, etc	....	400	....	7,327	....	....	107,576	26,968
7	Lake Erie	....	9,651,284	20,000	818,304	....	1,044	115,259	166,013
8	Lake Ontario	3,650	1,287,580	2,950	2,024,058	3,350	458,663	311,432	36,551
9	Inland Waters	400	39,052	....	71,033	800	13,578	107,532	158,942
	Totals	632,156	12,511,354	349,902	6,453,818	226,067	4,799,042	1,224,186	1,605,241
	Values	$ c. 31,607 80	$ c. 625,567 70	$ c. 34,990 20	$ c. 645,381 80	$ c. 22,606 70	$ c. 479,904 20	$ c. 61,209 30	$ c. 160,524 10

FISHERIES.

the quantity and value of all fishing materials and other fixtures employed in the year of 1920.

Fishing material													Other fixtures used in fishing			
Seines			Pound Nets		Hoop Nets		Dip or Roll Nets		Night Lines		Spears		Freezers and Ice Houses		Piers and Wharves	
No.	Yards	Value	No.	Value	No.	Value	No.	Value	No. Hooks	Value	No.	Value	No.	Value	No.	Value
		$		$		$		$		$		$		$		$
....	.....	.....	62	20,385	35	1,570	....	.....	.....	.....	....	.....	87	24,000	72	13,800
....	.....	.....	55	38,300	1	60	....	.....	2,600	180	....	.....	29	15,005	25	9,235
....	 8	.....	187	123,650	7	550	....	.....	.....	.....	....	.....	31	9,900	26	22,550
10	10	725	23	19,500	28	765	....	.....	28,800	4,505	....	.....	31	11,100	28	8,970
7	605	710	69	40,550	2	150	2	10	2,300	190	....	.....	30	10,640	15	2,100
55	9,251	7,990	14	4,400	229	39,850	1	10	1,600	130	....	.....	44	14,425	10	3,550
53	17,285	14,275	637	517,800	26	695	19	185	7,100	195	....	.....	113	121,285	63	28,560
14	1,395	2,500	.....	.....	725	27,390	1	20	7,165	364	....	.....	50	8,030	22	2,533
29	2,372	3,468	33	10,850	389	12,110	6	30	14,765	599	122	410	28	12,035	14	3,665
168	31,718	29,668	1,080	775,435	1,442	83,140	29	255	64,330	6,163	122	410	443	226,420	275	94,963

of fish caught during the year 1920

Sturgeon	Eels	Perch	Tullibee	Catfish	Carp	Mixed and Coarse fish	Caviare	Sturgeon Bladders	Pickerel (Blue)	Value
lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	No.	lbs.	$ c.
9,330	.....	12,277	129,430	52,992	9,441	191,209	379	198	5,316	194,381 83
30,607	20,496	.....	50	.....	.....	114,924	202	....	7,267	437,085 67
13,804	.....	8,415	20,712	1,730	17,213	420,791	138	....	.....	251,409 96
2,655	.....	4,098	76,274	2,415	54,319	43,383	30	....	.....	165,120 56
9,176	.....	129,157	206,029	227	3,988	99,056	649	....	2,176	144,955 75
13,004	.....	231,621	.....	141,247	395,437	603,136	526	....	400	80,711 14
267	38,742	1,272,181	.....	42,051	431,864	900,491	.....	....	3,354,523	952,473 63
500	91,932	107,383	300	170,215	65,674	413,841	338	240	9,842	384,398 46
109,628	26,408	29,615	.....	133,358	130,827	280,579	3,482	....	.....	80,556 74
188,971	177,578	1,794,747	432,795	544,235	1,108,763	3,067,410	5,744	438	3,379,524	2,691,093 74
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$	$	$ c.	$ c.
22,676 52	17,757 80	143,579 76	25,967 70	43,538 80	44,350 52	122,696 40	5,744	219	202,771 44	2,691,093 74

Comparative Statement of yield for 1919-20, according to Districts.

	1919	1920	Increase	Decrease
Kenora and Rainy River Districts:				
Herring, Salted..Lbs.				
Herring, Fresh.. "				
Whitefish, Salted.. "	1,100	319,400	318,300	
Whitefish, Fresh.. "	496,483	398,115		98,368
Trout, Salted.. "	50			50
Trout, Fresh.. "	90,807	123,232	32,425	
Pike.. "	635,4 4	449,457		185,947
Pickerel (Dore).. "	837,049	649,044		188,005
Sturgeon.. "	14,316	9,330		4,986
Eels.. "				
Perch.. "	9,717	12,277	2,560	
Tullibee.. "	241,263	129,430		111,833
Catfish.. "	76,754	52,992		23,762
Carp.. "	53,232	9,441		43,791
Mixed and Coarse Fish.. "	259,972	191,209		68,763
Caviare.. "	269	379	110	
Sturgeon Bladders..No.		198	198	
Pickerel (Blue)..Lbs.		5,316	5,316	
Lake Superior:				
Herring, Salted.. "	545,350	616,601	71,251	
Herring, Fresh.. "	1,508,157	1,286,953		221,204
Whitefish, Salted.. "	3,450	200		3,250
Whitefish, Fresh.. "	2,029,699	1,704,733		324,966
Trout, Salted.. "	144,638	145,700	1,062	
Trout, Fresh.. "	1,960,222	1,332,428		627,794
Pike.. "	18,980	15,271		3,709
Pickerel (Dore).. "	140,966	118,779		22,187
Sturgeon.. "	21,919	30,607	8,688	
Eels.. "		20,496	20,496	
Perch.. "				
Tullibee.. "	840	50		790
Catfish.. "				
Carp.. "				
Mixed and Coarse Fish.. "	290,217	114,924		175,293
Caviare.. "	152	202	50	
Pickerel Blue,.. "		7,267	7,267	
North Channel, (Lake Huron):				
Herring, Salted.. "	2,869	155		2,714
Herring, Fresh.. "	28,506	24,173		4,333
Whitefish, Salted.. "	848	552		296
Whitefish, Fresh.. "	799,336	902,703	103,367	
Trout, Salted.. "	10,550	967		9,583
Trout, Fresh.. "	1,595,608	1,107,771		487,837
Pike.. "	160,639	68,500		92,139
Pickerel (Dore).. "	225,404	242,003	16,599	
Sturgeon.. "	13,523	13,804	281	
Eels.. "				
Perch.. "	11,580	8,415		3,615
Tullibee.. "	25,996	20,712		5,284
Catfish.. "	1,111	1,730	619	
Carp.. "	1,020	17,213	16,193	
Mixed and Coarse Fish.. "	350,755	420,791	70,036	
Caviare.. "	86	138	52	
Georgian Bay:				
Herring, Salted.. "	5,600	3,650		1,950

Comparative Statement of yield for 1919-20, according to Districts—Continued.

		1919	1920	Increase	Decrease
Georgian Bay.—Continued:					
Herring, Fresh	Lbs.	60,870	49,282	.....	11,588
Whitefish, Salted	"	9,650	5,900	.....	3,750
Whitefish, Fresh	"	391,008	445,351	54,343	.....
Trout, Salted	"	26,300	18,400	.....	7,900
Trout, Fresh	"	898,417	972,158	73,741	.....
Pike	"	28,341	44,164	15,823	.....
Pickerel (Dore)	"	76,839	67,307	.....	9,532
Sturgeon	"	1,778	2,655	877	.....
Eels	"	50	.....	.....	50
Perch	"	6,076	4,098	.....	1,978
Tullibee	"	53,784	76,274	22,490	.....
Catfish	"	4,948	2,415	.....	2,533
Carp	"	54,516	54,319	.....	197
Mixed and Coarse Fish	"	81,277	43,383	.....	37,894
Caviare	"	.....	30	30	.....
Pickerel (Blue)	"	200	.....	.....	200
Lake Huron (Proper)					
Herring, Salted	"	8,000	7,700	.....	300
Herring, Fresh	"	143,017	172,630	29,613	.....
Whitefish, Salted	"	6,800	900	.....	5,900
Whitefish, Fresh	"	90,619	82,194	.....	8,425
Trout, Salted	"	51,550	56,850	5,300	.....
Trout, Fresh	"	827,722	790,168	.....	37,554
Pike	"	3,333	4,995	1,662	.....
Pickerel (Dore)	"	182,562	139,634	.....	42,928
Sturgeon	"	11,094	9,176	.....	1,918
Eels	"	25	.....	.....	25
Perch	"	67,469	129,157	61,688	.....
Tullibee	"	170,165	206,029	35,864	.....
Catfish	"	383	227	.....	156
Carp	"	6,910	3,988	.....	2,922
Mixed and Coarse Fish	"	105,314	99,056	.....	6,258
Caviare	"	1,023	649	.....	374
Pickerel, (Blue)	"	550	2,176	1,626	.....
Lake St. Clair, Etc:					
Herring, Salted	"	.....	.....	.....	.....
Herring, Salted	"	.....	400	400	.....
Whitefish, Salted	"	.....	.....	.....	.....
Whitefish, Fresh		13,300	7,327	.....	5,973
Trout, Salted	"	.....	.....	.....	.....
Trout, Fresh	"	.....	.....	.....	.....
Pike	"	38,235	107,576	69,341	.....
Pickerel (Dore)	"	60,319	26,968	.....	33,351
Sturgeon	"	10,800	13,004	2,204	.....
Eels	"	.....	.....	.....	.....
Perch	"	140,147	231,621	91,474	.....
Tullibee	"	.....	.....	.....	.....
Catfish	"	73,805	141,247	67,442	.....
Carp	"	294,440	395,437	100,997	.....
Mixed and Coarse Fish	"	537,262	603,136	65,874	.....
Caviare	"	478	526	48	.....
Pickerel (Blue)	"	500	400	.....	100
Lake Erie:					
Herring, Salted	"	.....	.....	.....	.....
Herring, Fresh	"	7,425,713	9,651,284	2,225,571	.....
Whitefish, Salted	"	.....	20,000	20,000	.....

Comparative Statement of yield f r 1919-20, according to Districts.—Concluded.

		1919	1920	Increase	Decrease
Lake Erie.—Continued:					
Whitefish, Fresh	Lbs.	1,094,280	818,304		275,976
Trout, Salted	"				
Trout, Fresh	"	1,528	1,044		484
Pike	"	727,037	115,259		611,778
Pickerel (Dore)	"	144,323	166,013	21,690	
Sturgeon	"	42,709	267		42,442
Eels	"		38,742	38,742	
Perch	"	1,096,935	1,272,181	175,246	
Tullibee	"	1,323			1,323
Catfish	"	33,972	42,051	8,079	
Carp	"	378,380	431,864	53,484	
Mixed and Coarse Fish	"	793,658	900,491	106,833	
Caviare	"	1,827¼			1,827¼
Sturgeon Bladders	No.	4			4
Pickerel (Blue)	Lbs.	2,387,787	3,354,523	966,736	
Lake Ontario:					
Herring, Salted	"	10,930	3,650		7,280
Herring, Fresh	"	1,709,412	1,287,580		421,832
Whitefish, Salted	"	7,225	2,950		4,275
Whitefish, Fresh	"	1,586,333	2,024,058	437,725	
Trout, Salted	"	900	3,350	2,450	
Trout, Fresh	"	553,203	458,663		94,540
Pike	"	246,095	311,432	65,337	
Pickerel (Dore)	"	40,459	36,551		3,908
Sturgeon	"		500	500	
Eels	"	167,186	91,932		75,254
Perch	"	158,802	107,383		51,419
Tullibee	"		300	300	
Catfish	"	247,840	170,215		77,625
Carp	"	169,471	65,674		103,797
Mixed and Coarse Fish	"	603,014	413,841		189,173
Caviare	"	202	338	136	
Sturgeon Bladders	No.		240	240	
Pickerel (Blue)	Lbs.	2,692	9,842	7,150	
Inland Waters:					
Herring, Salted	"		400	400	
Herring, Fresh	"	75,056	39,052		36,004
Whitefish, Salted	"	843			843
Whitefish, Fresh	"	94,330	71,033		23,297
Trout, Salted	"	500	800	300	
Trout, Fresh	"	12,335	13,578	1,243	
Pike	"	136,689	107,532		29,157
Pickerel (Dore)	"	214,079	158,942		55,137
Sturgeon	"	108,519	109,628	1,109	
Eels	"	20,842	26,408	5,566	
Perch	"	33,686	29,615		4,071
Tullibee	"	11,564			11,564
Catfish	"	116,087	133,358	17,271	
Carp	"	194,080	130,827		63,253
Mixed and Coarse Fish	"	336,279	280,579		55,700
Caviare	"	3,020	3,482	462	

STATEMENT OF THE YIELD OF THE FISHERIES OF THE PROVINCE OF ONTARIO FOR THE YEAR, 1920, AS FURNISHED BY THE FISHERMAN'S ANNUAL RETURNS.

Kinds of Fish	Quantity	Price	Value
Herring, Salted....Lbs....	632,156	5	$ 31,607 80
Herring, Fresh.... "	12,511,354	5	625,567 70
Whitefish, Salted.... "	349,902	10	34,990 20
Whitefish, Fresh.... "	6,453,818	10	645,381 80
Trout, Salted.... "	226,067	10	22,606 70
Trout, Fresh.... "	4,799,042	10	479,904 20
Pike.... "	1,224,186	5	61,209 30
Pickerel (Dore).... "	1,605,241	10	160,524 10
Sturgeon.... "	188,971	12	22,676 52
Eels.... "	177,578	10	17,757 80
Perch.... "	1,794,747	8	143,579 76
Tullibee.... "	432,795	6	25,967 70
Catfish.... "	544,235	8	43,538 80
Carp.... "	1,108,763	4	44,350 52
Mixed and Coarse Fish.... "	3,067,410	4	122,696 40
Caviare.... " ..	5,744	1 00	5,744 00
Sturgeon Bladders....No....	438	50	219 00
Pickerel (Blue)....Lbs....	3,379,524	6	202,771 44
Total....	....	....	2,691,093 74

COMPARATIVE STATEMENT OF THE YIELD OF THE FISHERIES OF THE PROVINCE.

——	1919	1920	Increase	Dec ease
Herring, Salted....Lbs....	572,749	632,156	59,407	....
Herring, Fresh.... "	10,950,731	12,511,354	1,560,623	....
Whitefish, Salted.... "	29,916	349,902	319,986	....
Whitefish, Fresh.... "	6,595,388	6,453,818	....	141,570
Trout, Salted.... "	234,488	226,067	....	8,421
Trout, Fresh.... "	5,939,842	4,799,042	....	1,140,800
Pike.... "	1,994,753	1,224,186	....	770,567
Pickerel (Dore).... "	1,922,000	1,605,241	....	316,759
Sturgeon.... "	224,658	188,971	....	35,687
Eels.... "	188,103	177,578	....	10,525
Perch.... "	1,524,412	1,794,747	.. 270,335	....
Tullibee.... "	504,935	432,795	....	72,140
Catfish.... "	554,900	544,235	....	10,665
Carp.... "	1,152,049	1,108,763	....	43,286
Mixed and Coarse Fish.... "	3,357,748	3,067,410	....	290,338
Caviare.... "	7,057¼	5,744	....	1,313¼
Sturgeon Bladders....No....	4	438	434	....
Pickerel (Blue)....lbs....	2,391,729	3,379,524	787,795	....
Total Pounds....	38,145,458¼	38,501,533	....	....
Total Increase, Pounds, 1920...	....	....	356,074¾	....

VALUE OF ONTARIO FISHERIES FROM 1901 TO 1920 INCLUSIVE

Years.	Value. $ c.	Years.	Value. $ c.
1901	1,428,078 00	1911	2,419,178 21
1902	1,265,705 00	1912	2,842,877 09
1903	1,535,144 00	1913	2,674,686 76
1904	1,793,524 00	1914	2,755,293 11
1905	1,708,963 00	1915	3,341,181 41
1906	1,734,865 00	1916	2,658,993 43
1907	1,935,024 90	1917	2,866,424 00
1908	2,100,078 63	1918	3,175,110 32
1909	2,237,544 41	1919	2,721,440 24
1910	2,348,269 57	1920	2,601,093 74

STATEMENT OF THE NUMBER AND VALUE OF THE TUGS, GASOLINE, SAIL OR ROW BOATS, NETS, SPEARS, ETC., USED IN THE FISHING INDUSTRY OF THE PROVINCE OF ONTARIO DURING THE YEAR 1920.

———	Number	Value
		$
Tugs (3,624 tons)	124	777,857
Gasoline Launches	803	44,206
Sail or Row Boats	1,088	64,666
Gill Nets	5,501,827 yards	766,788
Seines (31,718 yards)	168	29,668
Pound Nets	1,080	775,435
Hoop Nets	1,442	83,140
Dip or Roll Nets	29	255
Baited Hooks	64,330	6,163
Spears	122	410
Freezers and Ice Houses	443	226,420
Piers and Wharves	275	94,963
Total		3,269,971

Number of men employed on Tugs	691
" " " " Gasoline Launches	1,615
" " " " Sail or Row Boats	1,387
Total	3,693

ONTARIO

Return of the number of fishermen, tonnage and value of tugs, vessels and boats, the fishing industry during the year 1921, in the Public

	District	Fishing Material											
		Tugs				Gasoline Launches			Sail or Row Boats			Gill-Nets	
		No.	Tonnage	Value	Men	No.	Value	Men	No.	Value	Men	Yards	Value
	Kenora and Rainy River			$			$				$		$
1	Lake of the Woods	2	43	9,000	6	40	15,575	58	30	2,095	7	69,225	11,884
2	Rainy Lake	2	17	1,300	5	24	9,290	35	25	1,270	7	40,200	7,735
3	Manitou, Little Turtle, Kaiorskons, Yoke and Elbow	....	.....	.....	....	1	400	1	2	80	2	5,100	1,200
4	Trout, Clearwater, Pickerel, Pipestone and Noamicon	....	.....	.....	....	5	2,925	11	6	230	3	12,800	2,000
5	Sturgeon, Loon, Jackfish, Crashed Pine and Vista	....	.....	.....	....	.....	.....	.....	5	235	7	5,750	700
6	Sturgeon, Lac Suel, Eagle, Crow and Vermillion	1	18	6,000	2	17	9,500	27	8	530	4	29,930	4,650
7	Pipestone, Wabigoon, Shoal, Obabicon and Stormy	2	18	1,700	4	8	4,050	11	3	110	1	22,500	3,600
8	Shikog, Feegan, Basketh, Minnitakie and Abraham	....	.....	.....	....	1	400	2	4	180	4	6,500	1,175
9	McKenzie, Stanghikini, Bear, Indian and Orang Outang	....	.....	.....	....	6	1,490	8	1	75	1	14,200	2,180
10	Star, Keyes, Cedar, Sutana, Rock and Clay	....	.....	.....	....	1	300	1	6	375	6	8,530	2,205
		7	96	18,000	17	103	43,930	154	90	5,180	42	214,735	37,329

Return of the kinds, quantities and values of fish caught

	District	Herring, salted	Herring, fresh	Whitefish, salted	Whitefish, fresh	Trout, salted	Trout, fresh	Pike	Pickerel or Dore
	Kenora and Rainy River	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
1	Lake of the Woods	.....	.....	.....	80,085	.....	6,991	210,340	348,443
2	Rainy Lake	.....	.....	.....	45,415	.....	80	106,853	108,449
3	Manitou, Little Turtle, Kaiorskons, Yoke and Elbow	.....	.....	.....	8,055	978	8,252	2,742	2,642
4	Trout, Clearwater, Pickerel, Pipestone and Namicon	.....	.....	.....	26,619	.....	6,020	22,550	191,340
5	Sturgeon, Loon, Jackfish, Crashed Pine and Vista	.....	.....	.....	2,243	.....	671	6,683	3,496
6	Sturgeon, Lac Sul, Eagle Crow and Vermillion	.....	.....	.....	128,781	.....	34,163	59,122	179,039
7	Pipestone, Wabigoon, Shoal, Obabicon and Stormy	.....	.....	.....	65,125	.....	19,489	26,124	106,665
8	Shikog, Feegan, Basketh, Minnitakie and Abraham	.....	.....	.....	3,796	.....	548	11,308	23,629
9	McKenzie, Stanghikini, Bear, Indian and Orang Outang	.....	.....	.....	7,648	.....	2,100	1,357	4,610
10	Star, Keyes, Cedar, Sutana, Rock and Clay	.....	.....	700	16,897	.....	2,028	4,091	3,864
	Totals	.....	.....	700	384,664	978	80,342	451,170	972,177
	Values	$ c.	$ c.	$ c. 70 00	$ c. 38,466 40	$ c. 97 80	$ c. 8,034 20	$ c. 22,558 50	$ c. 97,217 70

FISHERIES

quantity and value of all fishing materials and other fixtures employed in the Waters of Kenora and Rainy River Districts.

Fishing Material													Other fixtures used in fishing			
Seines			Pound Nets		Hoop Nets		Dip or Roll Nets		Night Lines		Spears		Freezers and Ice Houses		Piers and Wharves	
No.	Yards	Value	No.	Value	No.	Value	No.	Value	No. Hooks	Value	No.	Value	No.	Value	No.	Value
		$		$		$		$		$		$		$		$
			30	6,700	33	1,730							25	9,070	27	5,725
			17	6,450									26	5,400	11	1,220
													2	300		
			5	1,600									6	850	3	225
													1	50	1	25
			2	1,000	10	1,000							14	5,025	10	4,460
													6	1,850	7	870
													2	600	2	200
													5	900	5	500
													2	200	2	125
			54	15,750	43	2,730							89	24,245	68	13,350

during the year 1921, in the Public Waters of Kenora and Rainy River Districts.

Sturgeon	Eels	Perch	Tullibee	Catfish	Carp	Mixed and course fish	Caviare	Sturgeon Bladders	Pickerel (Blue)	Value
lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	No.	lbs.	$ c.
		1,194	37,949	51,062	7,305	32,433				62,115 84
665		6,348	33,352		280	45,380				25,152 21
525						6,950	25			2,495 80
652		123	22,237			33,612				26,292 18
		200	500			4,909				1,217 51
			8,460			20,365				38,476 60
			2,747			15,759				21,229 28
			100			7,000				3,648 70
			2,857							1,675 07
			8,452							3,060 57
1,842		7,865	116,654	51,062	7,585	166,408	25			185,363 76
$ c. 221 04	$ c.	$ c. 629 20	$ c. 6,999 24	$ c. 4,084 96	$ c. 303 40	$ c. 6,656 32	$ c. 25 00	$ c.	$ c.	$ c. 185,363 76

ONTARIO

Return of the number of fishermen, tonnage and value of tugs, vessels and boats, fishing industry during the year 1921,

	District	Fishing material											
		Tugs				Gasoline Launches			Sail or Row Boats			Gill-Nets	
		No.	Tonnage	Value	Men	No.	Value	Men	No.	Value	Men	Yards	Value
	Lake Superior			$			$			$			$
1	Pigeon River to Sturgeon Point and Whitefish Lake	.....	.....	.....	.....	3	1,250	5	3	125	3	39,000	4,100
2	Thunder Bay	4	122	27,000	20	11	7,500	26	8	475	11	199,970	26,350
3	Black Bay and Point Magnet	.....	.....	.....	.....	6	3,075	7	4	840	6	23,300	3,725
4	Crayfish, Arrow, North Lake and Shaganash Islands	.....	.....	.....	.....	.....	.....	.....	4	315	5	5,300	865
5	Rossport and Wilson Island	4	89	12,000	12	7	3,325	14	8	435	5	106,345	26,175
6	Jackfish and Port Caldwell	1	18	2,000	3	1	400	2	3	225	3	5,000	750
7	Lake Nipigon	7	203	29,000	44	6	12,000	18	3	210	.....	108,000	12,325
8	Gros Cap, Goulais Bay and Batchawana Bay	1	14	4,000	4	6	2,120	11	13	685	20	44,070	4,330
9	Gargantua, Mamainse Point and Michipicoten	4	130	22,500	30	5	4,600	15	2	180	4	197,200	19,250
	Totals	21	576	96,500	113	45	34,270	98	48	3,490	57	728,185	97,870

Return of the kinds, quantities and values of fish caught

	District	Herring, salted	Herring, fresh	Whitefish, salted	Whitefish, fresh	Trout, salted	Trout, fresh	Pike	Pickerel or Dore
	Lake Superior	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
1	Pigeon River to Sturgeon Point and Whitefish Lake	.....	.....	.....	11,075	800	55,047	25	1,095
2	Thunder Bay	276,535	403,051	.....	102,828	115	175,593	15,802	68,717
3	Black Bay and Point Magnet	.....	15,000	.....	29,177	.....	9,779	9,875	18,560
4	Crayfish, Arrow, North Lake and Shaganash Islands	.....	335	200	3,124	300	17,446	2,040	100
5	Rossport and Wilson Islands	.....	2,000	.....	31,325	86,859	204,866	8,324	2,883
6	Jackfish and Port Caldwell	.....	3,040	.....	18,107	.....	44,688	.....	100
7	Lake Nipigon	.....	.....	.....	1,168,200	.....	427,825	7,810	91,765
8	Gros Cap, Goulais Bay and Batchawana Bay	.....	1,400	.....	42,996	250	82,234	3,081	12,508
9	Gargantua, Mamainsne Point and Michipicoten	.....	.....	.....	90,457	2,900	495,464	7,020	3,480
	Totals	276,535	424,826	200	1,497,289	91,224	1,512,942	53,977	199,208
	Values	$ c. 13,826 75	$ c. 21,241 30	$ c. 20 00	$ c. 149,728 90	$ c. 9,122 40	$ c. 151,294 20	$ c. 2,698 85	$ c. 19,920 80

FISHERIES

the quantity and value of all fishing materials and other fixtures employed in the in the Public Waters of Lake Superior.

Fishing material												Other fixtures used in fishing			
Seines		Pound Nets		Hoop Nets		Dip or Roll Nets		Night Lines		Spears		Freezers and Ice Houses		Piers and Wharves	
No. Yards	Value	No.	Value	No.	Value	No.	Value	No. Hooks.	Value	No.	Value	No.	Value	No.	Value
	$		$		$		$		$		$		$		$
				1	60							1	50	1	50
		2	2,500									2	1,600	6	1,625
		4	2,000									2	1,900	2	300
		2	400									3	225		
		13	4,300									3	2,100	4	750
		2	1,800												
		10	2,500												
		15	5,650					2,100	75			3	540	1	100
		14	7,000					2,500	125			4	2,600	3	1,450
		62	26,150	1	60			4,600	200			18	9,015	17	4,275

during the year 1921, in the Public Waters of Lake Superior.

Sturgeon	Eels	Perch	Tullibee	Catfish	Carp	Mixed and coarse fish	Caviare	Sturgeon Bladders	Pickerel (Blue)	Value
lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	No.	lbs.	$ c.
						7,299				7,094 91
						7,949				69,812 66
532					5,462	46,235				9,127 07
			300			3,250				2,383 75
						1,500				33,169 50
4,468										6,977 66
20,775							140			171,802 50
330						3,940	25		15,504	15,175 29
200						2,786				59,716 54
26,305			300		5,462	72,959	165		15,504	375,259 88
$ c. 3,156 60	$ c.	$ c.	$ c. 18 00	$ c.	$ c. 218 48	$ c. 2,918 36	$ c. 165 00	$ c.	$ c. 930 24	$ c. 375,259 88

ONTARIO

Return of the number of fishermen, tonnage and value of tugs, vessels and boats, the industry during the year 1921, in the Public

	District	Fishing material											
		Tugs				Gasoline Launches			Sail or Row Boats			Gill-Nets	
		No.	Tonnage	Value	Men	No.	Value	Men	No.	Value	Men	Yards	Value
	Lake Huron, North Channel.			$			$			$			$
1	Bruce Mines, St. Joseph's Island	....	.....	.....	....	1	250	2	6	310	8	11,375	865
2	Thessalon and Nesterville. .	....	.....	.....	....	5	2,950	13	14	800	17	27,516	3,835
3	Algoma Mills, Blind River, Pecard and Spragge.....	1	24	7,000	6	6	4,200	16	13	1,520	11	11,360	1,554
4	Spanish.....	1	27	3,500	3	7	2,950	14	15	985	13	33,940	3,952
5	Mississauga Sts., Cockburn, and Duck Islands.....	4	90	28,000	20	1	800	.....	1	50	2	99,600	5,250
6	Providence, South Bays, and Fitzwilliam Island.....	3	64	12,000	17	10	5,940	23	4	290	6	206,500	20,775
7	Killarney, Squaw Island and Wekwemikong Bay.....	4	89	37,000	20	15	11,025	26	6	248	6	191,800	35,215
8	Manitowaning and Sheguindah Bay, Lake Manitou. .	....	.....	.....	...	3	3,200	6	1	75	2	2,000	200
9	Little Current, Kagawong, and Mindemoya.....	3	59	10,000	13	5	4,650	8	13	685	7	40,500	2,505
10	Gore Bay, Meldrum Bay and Berry Island.....	5	153	40,700	23	3	1,640	5	10	490	6	146,450	16,745
	Totals.....	21	506	138,200	102	56	37,605	113	83	5,453	78	771,041	90,896

Return of the kinds, quantities and values of fish caught

	District	Herring, salted	Herring, fresh	Whitefish, salted	Whitefish, fresh	Trout, salted	Trout, fresh	Pike	Pickerel or Dore
	Lake Huron, North Channel.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
1	Bruce Mines, St. Joseph's Island	100	100	50	1,801	800	7,059	7,733	1,315
2	Thessalon and Nesterville.....	.....	.....	.....	35,529	500	61,776	11,157	5,873
3	Algoma Mills, Blind River, Pecard and Spragge.....	.....	7,235	.	27,879	.....	24,817	24,813	67,455
4	Spanish	540	11,579	.....	4,293	.....	7,534	27,097	39,411
5	Mississauga Straits, Cockburn and Duck Islands.....	.....	.....	.....	58,800	.....	464,731	.....	.....
6	Providence, South Bays and Fitzwilliam Island.....	.....	.....	600	19,535	2,754	399,613	6,008	209
7	Killarney, Squaw Island and Wekwemikong Bay.....	.....	.....	100	331,190	56	260,677	21,158	16,667
8	Manitowaning and Sheguindah Bay, Lake Manitou	.....	.....	.....	27,351	.....	19,347	2,116	4,726
9	Little Current, Kagawong and Mindemoya.....	265	4,781	.....	103,178	.....	60,813	33,108	23,686
10	Gore Bay, Meldrum Bay and Berry Island.....	.....	39	1,500	55,440	1,000	282,847	1,514	1,377
	Totals.....	905	23,734	2,250	664,996	5,110	1,589,214	134,704	160,719
	Values.....	$ c. 45 25	$ c. 1,186 70	$ c. 225 00	$ c. 66,499 60	$ c. 511 00	$ c. 158,921 40	$ c. 6,735 20	$ c. 16,071 90

FISHERIES

quantity and value of all fishing materials and other fixtures employed in the fishing Waters of Lake Huron, North Channel.

Fishing material													Other fixtures used in fishing			
Seines			Pound Nets		Hoop Nets		Dip or Roll Nets		Night Lines		Spears		Freezers and Ice Houses		Piers and Wharves	
No.	Yards	Value	No.	Value	No.	Value	No.	Value	No. Hooks.	Value	No.	Value	No.	Value	No.	Value
		$		$		$		$		$		$		$		$
....	.....	.....	1	500	2	60	....	.....	.....	.....	.....	.....	4	360	2	400
....	.....	.....	15	6,600	3	115	....	.....	.....	.....	.....	.....	5	1,700	4	800
....	.....	.....	27	13,900	5	265	....	.....	.....	.....	.....	.....	5	2,900	5	5,500
....	.....	.....	30	14,900	....	.....	....	.....	.....	.....	.....	.....	8	1,650	5	3,300
....	.....	.....	16	14,900	....	.....	....	.....	.....	.....	.....	.....	1	400	1	500
....	.....	.....	1	600	....	.....	....	.....	4,500	750	....	.....	....	.....	....	.....
....	.....	.....	32	20,500	....	.....	....	.....	.....	.....	.....	.....	1	500	1	500
....	.....	.....	14	7,000	....	.....	....	.....	.....	.....	.....	.....	1	200	1	1,500
....	.....	.....	34	16,900	....	.....	....	.....	.....	.....	.....	.....	5	1,265	7	1,400
....	.....	.....	24	15,000	....	.....	....	.....	.....	.....	.....	.....	4	1,300	4	3,100
....	.....	.....	194	110,800	10	440	....	.....	4,500	750	....	.....	34	10,275	30	17,000

during the year 1921, in the Public Waters of Lake Huron, North Channel.

Sturgeon	Eels	Perch	Tullibee	Catfish	Carp	Mixed and coarse fish	Caviare	Sturgeon Bladders	Pickerel (Blue)	Value
lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	No.	lbs.	$ c.
.....	.....	650	.....	.....	50	3,000	.....	.....	.....	1,673 15
394	.....	764	.....	.....	4,187	34,478	.....	.....	.....	12,580 65
3,571	.....	1,561	500	.....	2,701	199,035	155	.....	.....	22,425 34
3,293	.....	1,922	.....	200	2,983	65,787	61	.....	.....	10,461 32
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	52,353 10
.....	.....	.....	49,661	.....	.....	16,703	.....	.....	.....	46,219 28
369	.....	571	.....	3,692	806	450	19	.....	.....	62,381 46
132	.....	695	.....	.....	.....	23,035	.....	.....	.....	6,241 04
3,702	.....	3,880	.....	40	30	58,199	.....	.....	.....	23,762 40
1,442	.....	1,820	.....	177	60	10,913	.....	.....	.....	35,065 77
12,903	.....	11,863	50,161	4,109	10,817	411,600	235	.....	.....	273,163 51
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
1,548 36	.....	949 04	3,009 66	328 72	432 68	16,464 00	235 00	.....	.....	273,163 51

ONTARIO

Return of the number of fishermen, tonnage and value of tugs, vessels and boats, fishing industry during the year 1921,

	District	Fishing material											
		Tugs				Gasoline Launches			Sail or Row Boats			Gill-Nets	
		No.	Tonnage	Value	Men	No.	Value	Men	No.	Value	Men	Yards	Value
	Georgian Bay			$			$			$			$
1	Parry Sound	5	164	27,000	27	19	17,825	42	18	1,785	32	417,850	42,945
2	Simcoe and Muskoka	1	24	8,000	5	20	9,620	34	29	1,665	38	160,900	14,610
3	Grey County	3	66	12,000	14	26	27,750	59	12	1,150	8	240,920	24,698
4	Bruce County	1	20	4,000	4	15	13,875	31	12	980	14	115,145	11,030
	Total	10	274	51,000	50	80	69,070	166	71	5,580	92	934,815	93,283

Return of the kinds, quantities and values of fish caught during

	District	Herring, salted	Herring, fresh	Whitefish, salted	Whitefish, fresh	Trout, salted	Trout, fresh	Pike	Pickerel or Dore
	Georgian Bay	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
1	Parry Sound	.....	3,387	2,065	470,880	900	273,455	49,455	18,530
2	Simcoe and Muskoka	2,750	19,580	2,950	57,048	8,330	92,316	36,882	19,979
3	Grey County	.....	17,150	.....	7,993	1,650	289,689	.....	.....
4	Bruce County	.....	20,885	.....	14,494	7,100	253,506	476	42
	Totals	2,750	61,002	5,015	550,415	17,980	908,966	86,813	38,551
	Values	$ c. 137 50	$ c. 3,050 10	$ c. 501 50	$ c. 55,041 50	$ c. 1,798 00	$ c. 90,896 60	$ c. 4,340 65	$ c. 3,855 10

FISHERIES

the quantity and value of all fishing materials and other fixtures employed in the in the Public Waters of Georgian Bay.

Fishing material													Other fixtures used in fishing			
Seines			Pound Nets		Hoop Nets		Rip or Roll Nets		Night Lines		Spears		Freezers and Ice Houses		Piers and Wharves	
No.	Yards	Value	No.	Value	No.	Value	No.	Value	No. Hooks.	Value	No.	Value	No.	Value	No.	Value
		$		$		$		$		$		$		$		$
1	100	25	12	86,700	1	30	.....	.....	1,500	32	.....	.....	9	6,950	11	4,225
10	1,660	1,138	.....	.....	52	1,240	.....	.....	9,900	5,875	.....	.....	7	1,220	4	1,235
1	30	25	3	2,500	.....	.....	.....	.....	11,600	1,560	.....	.....	6	875	8	1,425
.....	.....	.....	.....	.....	.....	.....	.....	.....	6,900	925	.....	.....	9	3,360	11	1,600
12	1,790	1,188	15	89,200	53	1,270	.....	.....	29,900	8,392	.....	.....	31	12,405	34	8,485

the year 1921, in the Public Waters of Georgian Bay.

Sturgeon	Eels	Perch	Tullibee	Catfish	Carp	Mixed and coarse fish	Caviare	Sturgeon Bladders	Pickerel (Blue)	Value
lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	No.	lbs.	$ c
1,469	.....	.....	.....	2,006	2,500	12,173	.....	.....	.....	80,148 78
1,055	.....	3,385	1,800	11,313	66,214	121,441	20	.....	.....	29,959 54
.....	.....	50	10,370	.....	.....	600	.....	.....	.....	31,440 90
105	.....	1,000	70,150	500	13	4,096	.....	.....	.....	33,088 21
2,629	.....	4,435	82,320	13,819	68,727	138,310	20	.....	.....	174,637 43
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
315 48	.....	354 80	4,939 20	1,105 52	2,749 08	5,532 40	20 00	.....	.....	174,637 43

ONTARIO

Return of the number of fishermen, tonnage and value of tugs, vessels and boats, fishing industry during the year 1921,

	District	Fishing material											
		Tugs				Gasoline Launches			Sail or Row Boats			Gill-Nets	
		No.	Tonnage	Value	Men	No.	Value	Men	No.	Value	Men	Yards	Value
	Lake Huron (Proper)			$			$			$			$
1	Bruce County	5	110	20,000	28	13	9,800	27	10	1,790	13	347,460	32,080
2	Huron County	....	....	.....	....	11	7,375	22	.....	.....	.....	87,200	14,200
3	Lambton(including St. Clair River)	....	.....	.....	....	22	10,050	43	20	1,345	16	.....	.....
	Totals	5	110	20,000	28	46	27,225	92	30	3,135	29	434,660	46,280

Return of the kinds, quantities and values of fish caught

	District	Herring, salted	Herring, fresh	Whitefish, salted	Whitefish, fresh	Trout, salted	Trout, fresh	Pike	Pickerel or Dore
	Lake Huron (Proper)	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
1	Bruce County	4,400	22,244	6,350	26,998	11,595	585,945	1,099	645
2	Huron County	.....	10,604	.....	.....	500	82,911	3,000	250
3	Lambton (including St. Clair River)	1,700	71,043	.....	43,145	.....	9,226	2,968	124,328
	Totals	6,100	103,891	6,350	70,143	12,095	678,082	7,067	125,223
	Values	$ c. 305 00	$ c. 5,194 55	$ c. 635 00	$ c. 7,014 30	$ c. 1,209 50	$ c. 67,808 20	$ c. 353 35	$ c. 12,522 30

FISHERIES

the quantity and value of all fishing materials and other fixtures employed in the in the Public Waters of Lake Huron. (Proper)

Fishing material													Other fixtures used in fishing			
Seines			Pound Nets		Hoop Nets		Dip or Roll Nets		Night Lines		Spears		Freezers and Ice Houses		Piers and Wharves	
No.	Yards	Value	No.	Value	No.	Value	No.	Value	No. Hooks.	Value	No.	Value	No.	Value	No.	Value
		$		$		$		$		$		$		$		$
....	.....	.....	2	600	.....	.....	....	.....	.....	.....	....	.....	13	3,075	8	1,090
....	.....	.....	.....	.....	....	.....	....	.....	.....	.....	....	.....	7	725	.....	.....
7	810	615	64	36,575	2	100	....	.....	.....	.....	....	.....	12	2,440	2	250
7	810	615	66	37,175	2	100	....	.....	.....	.....	....	.....	32	6,240	10	1,340

during the year 1921, in the Public Waters of Lake Huron. (Proper)

Sturgeon	Eels	Perch	Tullibee	Catfish	Carp	Mixed and coarse fish	Caviare	Sturgeon Bladders	Pickerel (Blue)	Value
lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	No.	lbs.	$ c.
28		4,634	112,773	.....	.....	547	.....	.....	.....	71,702 79
.....	.....	109,509	8,275	.....	.....	13,810	.....	.....	.....	18,855 92
8,260	.....	12,993	.....	481	3,518	87,568	4,713	.....	546	31,913 77
8,288	.....	127,136	121,048	481	3,518	101,925	4,713	.....	546	122,472 48
$ c. 994 56	$ c.	$ c. 10,170 88	$ c. 7,262 88	$ c. 38 48	$ c. 140 72	$ c. 4,077 00	$ c. 4,713 00	$ c.	$ c. 32 76	$ c 122,472 48

ONTARIO

Return of the number of fishermen, tonnage and value of tugs, vessels and boats, fishing industry during the year 1921,

	District	Fishing material											
		Tugs				Gasoline Launches			Sail or Row Boats			Gill-Nets	
		No.	Tonnage	Value	Men	No.	Value	Men	No.	Value	Men	Yards	Value
	Lake St. Clair, Etc.			$			$			$			$
1	Kent County (Including River Thames)					34	16,040	40	55	4,405	63		
2	Essex County					28	10,395	24	34	4,640	22		
3	Detroit River					1	150	2	21	595	36		
	Totals					63	26,585	66	110	9,640	121		

Return of the kinds, quantities and values of fish caught

	District	Herring, salted	Herring, fresh	Whitefish, salted	Whitefish, fresh	Trout, salted	Trout, fresh	Pike	Pickerel or Dore
	Lake St. Clair, etc.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
1	Kent County (Including River Thames)							34,123	26,102
2	Essex County		300		2,200			14,922	10,096
3	Detroit River		25		200			5,950	1,400
	Total		325		2,400			54,995	37,598
	Values	$ c.	$ c. 16 25	$ c.	$ c. 240 00	$ c.	$ c.	$ c. 2,749 75	$ c. 3,759 80

FISHERIES

the quantity and value of all fishing materials and other fixtures employed in the in the Public Waters of Lake St. Clair, etc.

Fishing material													Other fixtures used in fishing			
Seines			Pound Nets		Hoop Nets		Dip or Roll Nets		Night Lines		Spears		Freezers and Ice Houses		Piers and Wharves	
No.	Yards	Value	No.	Value	No.	Value	No.	Value	No. Hooks.	Value	No.	Value	No.	Value	No.	Value
		$		$		$		$		$		$		$		$
31	4,802	4,205	.....	.....	131	15,510	.....	.....	300	30	.....	.....	35	9,675	26	6,350
8	2,225	1,500	6	2,125	87	10,725	.....	.....	1,100	155	1	300	19	8,775	7	875
25	3,227	1,962	.....	.....	.....	.....	1	2	600	55	.....	.....	.....	.....	.....	.....
64	10,254	7,667	6	2,125	218	26,235	1	2	2,000	240	1	300	54	18,450	33	7,225

during the year 1921, in the Public Waters of Lake St. Clair, etc.

Sturgeon	Eels	Perch	Tullibee	Catfish	Carp	Mixed and coarse fish	Caviare	Sturgeon Bladders	Pickerel (Blue)	Value
lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	No.	lbs.	$ c.
.....	.....	89,004	.....	41,890	182,368	269,239	.....	.....	.....	32,852 15
10,320	.....	41,650	.....	24,458	68,109	152,356	3,741	.....	.....	21,077 34
1,565	.....	650	.....	1,210	66,240	16,478	60	.....	160	4,173 67
11,885	.....	131,304	.....	67,558	316,717	438,073	3,801	.....	160	58,103 16
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
1,426 20	.....	10,504 32	.....	5,404 64	12,668 68	17,522 92	3,801 00	.....	9 60	58,103 16

ONTARIO

Return of the number of fishermen, tonnage and value of tugs, vessels and boats, fishing industry during the year 1921,

District	Fishing material											
	Tugs				Gasoline Launches			Sail or Row Boats			Gill-Nets	
	No.	Tonnage	Value	Men	No.	Value	Men	No.	Value	Men	Yards	Value
Lake Erie			$			$			$			$
1 Essex County	4	101	32,000	18	37	35,130	86	36	4,785	30	126,240	12,838
2 Kent County	4	123	24,400	13	55	44,750	139	32	4,822	1	85,500	6,815
3 Elgin County	23	793	216,964	141	21	13,225	82	23	3,031	18	741,260	100,030
4 Norfolk County	9	221	45,500	47	28	15,395	77	57	5,725	47	302,600	29,779
5 Haldimand (including Grand River)	9	198	53,600	44	12	8,400	32	37	5,250	40	229,000	24,100
6 Welland County (including upper Niagara River)	.....	.....	.....	.....	2	1,200	7	15	800	18	17,900	1,475
Totals	49	1,436	372,464	263	155	118,100	423	200	24,413	154	1,502,500	175,037

Return of the kinds, quantities and values of fish caught during

District	Herring, salted	Herring, fresh	Whitefish, salted	Whitefish, fresh	Trout, salted	Trout, fresh	Pike	Pickerel or Dore
Lake Erie	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
1 Essex County	.....	37,413	.....	247,634	.....	.....	5,137	80,330
2 Kent County	.....	203,861	.....	72,803	.....	.....	758	119,925
3 Elgin County	.....	1,129,730	1,851	200,838	.....	.....	2,650	89,159
4 Norfolk County	.....	2,351,442	.....	100,561	.....	391	84,722	6,093
5 Haldimand County (including Grand River)	.....	1,479,714	.....	335,433	.....	246	945	14,654
6 Welland County (including upper Niagara River)	.....	23,140	.....	7,379	.....	.....	2,480	860
Totals	.....	5,225,300	1,851	964,648	.....	637	96,692	311,021
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
Values	.....	261,265 00	185 10	96,464 80	.....	63 70	4,834 60	31,102 10

FISHERIES

the quantity and value of all fishing materials and other fixtures employed in the in the Public Waters of Lake Erie.

Fishing material													Other fixtures used in fishing			
Seines			Pound Nets		Hoop Nets		Dip or Roll Nets		Night Lines		Spears		Freezers and Ice Houses		Piers and Wharves	
No.	Yards	Value	No.	Value	No.	Value	No.	Value	No. Hooks.	Value	No.	Value	No.	Value	No.	Value
		$		$		$		$		$		$				$
10	2,675	2,530	202	117,100	10	5,025	....	.....	725	85	....	.....	28	18,525	9	2,400
5	1,675	950	223	193,900	.....	.....	3	10	.....	.....	....	.....	41	79,900	24	8,850
.....	.....	.....	127	78,350	.....	.....	3	15	1,570	629	....	.....	25	28,305	12	6,893
31	11,900	8,115	12	8,500	22	475	....	.....	700	413	....	.....	17	9,500	15	4,130
5	640	955	58	30,300	.....	.....	6	142	600	300	....	.....	11	5,000	6	1,260
....	.....	.....	6	3,000	.....	.....	9	77	4,200	180	....	.....	2	150	....	.....
51	16,890	12,550	628	431,150	32	5,500	21	244	7,795	1,607	....	.....	124	141,380	66	23,533

the year 1921, in the Public Waters of Lake Erie.

Sturgeon	Eels	Perch	Tullibee	Catfish	Carp	Mixed and coarse fish	Caviare	Sturgeon Bladders	Pickerel (Blue)	Value
lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	No.	lbs.	$ c
.....	14,455	390,270	.....	11,541	69,046	516,315	.....	.....	457,192	119,360 24
.....	.....	784,573	.....	6	36,416	272,147	.....	.....	2,533,984	256,651 63
.....	.....	500,671	68	21,916	928	61,099	.....	.....	2,504,136	280,344 08
.....	29	179,877	.....	10,850	147,638	114,925	.....	.....	376,180	180,847 08
.....	10	91,126	.....	457	51,817	106,200	.....	.....	453,386	149,917 73
.....	610	18,381	.....	812	39,582	850	.....	.....	41,676	7,819 18
.....	15,104	1,964,898	68	45,582	345,427	1,071,536	.....	.....	6,366,554	994,939 94
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
.....	1,510 40	157,191 84	4 08	3,646 56	13,817 08	42,861 44	....	.....	381,993 24	994,939 94

ONTARIO

Return of the number of fishermen, tonnage and value of tugs, vessels and boats, the industry during the year 1921, in the Public

	District	Fishing material											
		Tugs				Gasoline Launches			Sail or Row Boats			Gill-Nets	
		No.	Tonnage	Value	Men	No.	Value	Men	No.	Value	Men	Yards	Value
	Lake Ontario.			$			$			$			$
1	Lincoln County					16	6,505	27	7	305	16	53,050	6,805
2	Wentworth County					5	3,200	10	6	400	9	43,200	5,885
3	Halton County					13	7,500	20	4	180	7	78,500	11,080
4	Peel County					2	1,200	5	1	35	3	12,000	1,700
5	York County					12	5,075	18	7	550	9	41,500	8,468
6	Ontario County					15	5,750	27	3	70	3	63,800	5,570
7	Durham County					22	13,000	44	1	100	2	154,500	15,265
8	Northumberland County					29	12,650	53	14	895	24	124,800	13,300
9	Prince Edward County					84	33,255	160	101	3,925	161	468,595	49,241
10	Bay of Quinte					69	24,000	138	144	7,897	237	418,450	36,225
11	Lennox and Addington Counties					11	2,800	17	3	150	4	67,600	5,504
12	Frontenac County					12	3,675	17	31	1,231	41	42,000	4,220
	Totals					290	118,610	536	322	15,738	516	1,567,995	163,263

Return of the kinds, quantities and values of fish caught

	District	Herring, salted	Herring, fresh	Whitefish, salted	Whitefish, fresh	Trout, salted	Trout, fresh	Pike	Pickerel or Dore
	Lake Ontario.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
1	Lincoln County		45,470		21,852		104,308	374	150
2	Wentworth County		25,400		29,200	400	9,350		825
3	Halton County	296	63,727		38,171	495	29,910	550	
4	Peel County		6,000		4,000		46,000	200	
5	York County		16,166		60,742		11,425		
6	Ontario County		961		86,161	200	3,493	320	
7	Durham County		1,000		188,620	1,000	19,230		
8	Northumberland County	500	10,305		217,842	40	49,999	21,950	100
9	Prince Edward County	1,025	271,327	3,868	734,179	26,311	184,739	39,391	1,959
10	Bay of Quinte	350	562,860	5,920	626,654	257	16,914	144,203	66,231
11	Lennox and Addington Counties		7,909		121,005		34,219	1,500	1,700
12	Frontenac County	15	3,294	700	28,560	840	19,715	24,655	2,340
	Totals	2,186	1,014,419	10,488	2,156,986	29,543	529,302	233,143	73,305
	Values	$ c. 109 30	$ c. 50,720 95	$ c. 1,048 80	$ c. 215,698 60	$ c. 2,954 30	$ c. 52,930 20	$ c. 11,657 15	$ c. 7,330 50

FISHERIES

quantity and value of all fishing materials and other fixtures employed in the fishing Waters of Lake Ontario.

Fishing material													Other fixtures used in fishing			
Seines			Pound Nets		Hoop Nets		Dip or Roll Nets		Night Lines		Spears		Freezers and Ice Houses		Piers and Wharves	
No.	Yards	Value	No.	Value	No.	Value	No.	Value	No. Hooks.	Value	No.	Value	No.	Value	No.	Value
		$		$		$		$		$		$		$		$
5	516	500	....	.....	.....	.....	.....	.....	1,200	345	....	.....	2	250	....	.....
....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1,000	....	.....
2	400	200	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	250	7	1,400
2	75	100	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	300
4	650	640	....	.....	.....	.....	.....	.....	300	7	....	.....	.....	.....	.....	.....
3	300	405	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	875	....	.....
1	400	200	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
....	.....	.....	.....	.....	26	1,030	.....	.....	1,200	30	.....	.....	5	225	1	300
2	225	125	....	.....	148	5,270	.....	.....	5,468	487	.....	.....	32	4,285	7	630
1	7	10	....	.....	408	12,785	.....	.....	4,790	151	.....	.....	8	1,285	6	250
....	.....	.....	.....	.....	2	80	.....	.....	300	8	.....	.....	.....	.....	.....	.....
1	10	25	....	.....	117	4,145	....	.....	2,700	71	....	.....	8	1,350	7	910
21	2,583	2,205	....	.....	701	23,310	....	.....	15,958	1,099	....	.....	64	9,520	29	3,790

during the year 1921, in the Public Waters of Lake Ontario.

Sturgeon	Eels	Perch	Tullibee	Catfish	Carp	Mixed and coarse fish	Caviare	Sturgeon Bladders	Pickerel (Blue)	Value
lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	No.	lbs.	$ c.
1,464	849	2,145	.....	74	8,250	13,317	103	.....	8,824	16,856 42
.....	.....	1,125	.....	.....	.....	1,475	.....	.....	.....	5,396 50
.....	.....	.....	.....	.....	1,895	13,836	.....	.....	100	10,721 49
.....	.....	.....	.....	.....	4,000	17,200	.....	.....	.....	6,158 00
.....	1,200	.....	.....	.....	9,656	12,945	.....	.....	.....	9,049 04
.....	.....	76	.....	654	1,011	5,884	.....	.....	502	9,413 77
.....	.....	.....	.....	.....	500	3,563	.....	.....	.....	21,097 52
.....	4,775	3,100	.....	3,100	.....	43,259	.....	.....	8,700	31,661 71
324	22,285	6,705	.....	38,148	19,310	71,011	.....	.....	.....	120,162 41
.....	53,654	61,348	475	120,396	11,875	200,308	.....	.....	4,908	135,683 47
.....	2,280	140	.....	30	225	.....	.....	.....	.....	16,413 45
.....	27,183	12,633	.....	21,227	6,145	33,052	.....	.....	.....	13,608 68
1,798	112,226	87,272	475	183,629	62,867	415,850	103	.....	23,034	396,222 46
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
215 76	11,222 60	6,981 76	28 50	14,690 32	2,514 68	16,634 00	103 00		1,382 04	396,222 46

ONTARIO

Return of the number of fishermen, tonnage and value of tugs, vessels and boats, fishing industry during the year 1921,

	District	Fishing Material											
		Tugs				Gasoline Launches			Sail or Row Boats			Gill-nets	
		No.	Tonnage	Value	Men	No.	Value	Men	No.	Value	Men	Yards	Value
	Inland Waters			$			$			$			$
1	Frontenac County								27	895	44		
2	Lanark and Leeds Counties					41	13,430	54	10	325	12		
3	Grenville, Dundas, Stormont and Glengarry Counties					15	1,800	15	23	444	5		
4	Prescott, Russell, Carleton and Renfrew Counties	3	9	5,400	6	9	1,750	10	50	968	40	2,802	535
5	Peterborough and Victoria Counties					6	1,375	9	22	525	33		
6	Lake Simcoe					5	2,950	17	10	500	8		
7	Lake Nipissing					4	3,025	11					
8	Temiskaming and Nipissing Districts					6	4,000	15	13	1,150	11	25,150	5,366
	Totals	3	9	5,400	6	86	28,330	131	155	4,807	153	27,952	5,901

Return of the kinds, quantities and values of fish caught

	District	Herring, salted	Herring, fresh	Whitefish, salted	Whitefish, fresh	Trout, salted	Trout, fresh	Pike	Pickerel or Dore
	Inland Waters	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
1	Frontenac County							19,208	
2	Lanark and Leeds Counties							5,992	
3	Grenville, Dundas, Stormont and Glengarry Counties							800	
4	Prescott, Russell, Carleton and Renfrew Counties							6,635	2,216
5	Peterborough and Victoria Counties		2,500					10,751	
6	Lake Simcoe				2,013		9,289		
7	Lake Nipissing		11,999		22,621			30,577	99,376
8	Temiskaming and Nipissing Districts	350	9,179	200	23,504	100	1,519	45,305	47,208
	Totals	350	23,678	200	48,138	100	10,808	119,268	148,800
	Values	$ c. 17 50	$ c. 1,183 90	$ c. 20 00	$ c. 4,813 80	$ c. 10 00	$ c. 1,080 80	$ c. 5,963 40	$ c. 14,880 00

FISHERIES

the quantity and value of all fishing materials and other fixtures employed in the in Inland Waters.

Fishing Material													Other fixtures used in fishing			
Seines			Pound Nets		Hoop Nets		Dip or Roll Nets		Night Lines		Spears		Freezers and Ice Houses		Piers and Wharves	
No.	Yards	Value	No.	Value	No.	Value	No.	Value	No. Hooks.	Value	No.	Value	No.	Value	No.	Value
		$		$		$		$		$		$		$		$
8	80	310	....	.....	72	3,390	....	.....	600	21	....	.....	2	270	....	.....
3	60	300	....	.....	100	3,720	....	.....	2,900	185	....	.....	....	.....	....	.....
..	.....	.....	....	.....	1	35	1	2	3,585	86	....	.....	3	300	1	100
.	..	....	....	.....	79	1,642	1	2	6,825	167	....	.....	32	990	....	.....
6	218	416	....	.....	95	2,320	9	24	.....	.....	....	.....	4	250	....	.....
8	1,900	3,850	....	.....	7	95	8	50	.....	.....	115	701	105	3,828	3	1,500
..	.....	.....	17	6,400	....	.....	....	.....	.....	.....	....	.....	2	1,450	3	1,500
..	.....	.....	10	2,800	31	690	....	.....	....	....	....	.....	6	1,950	1	300
25	2,258	1,876	27	9,200	385	11,892	19	78	13,910	459	115	701	151	9,038	8	3,400

during the year 1921, in Inland Waters.

Sturgeon	Eels	Perch	Tullibee	Catfish	Carp	Mixed and Course Fish	Caviare	Sturgeon Bladders	Pickerel (Blue)	Value
lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	No.	lbs.	$ c.
....	10,621	5,685	.....	31,815	1,500	54,911	.....	.....	.....	7,278 94
1,510	10,444	2,220	.....	45,460	.....	39,805	.....	.....	.....	6,931 80
7,956	3,008	50	.....	1,225	1,100	300	46	.....	.....	1,499 52
.....	3,964	11,633	.....	16,827	4,185	42,893	20	.....	100	5,135 67
.....	8,445	2,703	.....	36,347	2,400	51,595	.....	.....	....	6,790 85
.....	.....	.....	.....	.....	250,521	53,143	.....	.....	.....	13,276 76
59,813	.....	.....	.....	.....	.....	14,400	1,857	.....	.....	23,939 06
.....	.....	173	500	.....	.....	43,049	.....	.....	.....	11,760 69
69,279	36,182	22,464	500	131,674	259,706	300,096	1,923	.....	100	76,613 20
$ c. 8,313 48	$ c. 3,648 20	$ c. 1,797 12	$ c. 30 00	$ c. 10,533 92	$ c. 10,388 24	$ c. 12,003 84	$ c. 1,923 00	$ c.	$ c. 6 00	76,613 20

ONTARIO

Recapitulation of the number of fishermen, tonnage and value of tugs, vessels and boats fishing industry

Districts.	Fishing material											
	Tugs				Gasoline Launches			Sail or Row Boats			Gill-Nets	
	No.	Tonnage	Value	Men	No.	Value	Men	No.	Value	Men	Yards	Value
			$			$			$			$
1 Kenora and Rainy River Districts	7	96	18,000	17	103	43,930	154	90	5,180	42	214,735	37,329
2 Lake Superior	21	576	96,500	113	45	34,270	98	48	3,490	57	728,185	97,870
3 Lake Huron (North Channel)	21	506	138,200	102	56	37,605	113	83	5,453	78	771,041	90,896
4 Georgian Bay	10	274	51,000	50	80	69,070	166	71	5,580	92	934,815	93,283
5 Lake Huron (Proper)	5	110	20,000	28	46	27,225	92	30	3,135	29	434,660	46,280
6 Lake St. Clair etc	.....	.....	.....	.....	63	26,585	66	110	9,640	121	.....	.....
7 Lake Erie	49	1,436	372,464	263	155	118,100	423	200	24,413	154	1,502,500	175,037
8 Lake Ontario	.....	.....	.....	.....	290	118,610	536	322	15,738	516	1,567,995	163,263
9 Inland Waters	3	9	5,400	6	86	28,330	131	155	4,807	153	27,952	5,901
Totals	116	3,007	701,564	579	924	503,725	1,779	1,109	77,436	1,242	6,181,883	769,859

Recapitulation of the kinds, quantities and values

Districts.	Herring, salted	Herring, fresh	Whitefish, salted	Whitefish, fresh	Trout, salted	Trout, fresh	Pike	Pickerel or Dore
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
1 Kenora and Rainy River Districts	.....	.....	700	384,664	978	80,342	451,170	972,177
2 Lake Superior	276,535	424,826	200	1,497,289	91,224	1,512,942	53,977	199,208
3 Lake Huron (North Channel)	905	23,734	2,250	664,996	5,110	1,589,214	134,704	160,719
4 Georgian Bay	2,750	61,002	5,015	550,415	17,980	908,966	86,813	38,551
5 Lake Huron (Proper)	6,100	103,891	6,350	70,143	12,095	678,082	7,067	125,223
6 Lake St. Clair etc	.....	325	.....	2,400	.....	.....	54,995	37,598
7 Lake Erie	.....	5,225,300	1,851	964,648	.....	637	96,692	311,021
8 Lake Ontario	2,186	1,014,419	10,488	2,156,986	29,543	529,302	233,143	73,305
9 Inland Waters	350	23,678	200	48,138	100	10,808	119,268	148,800
Totals	288,826	6,877,175	27,054	6,339,679	157,030	5,310,293	1,237,829	2,066,602
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
Values	14,441 30	343,858 75	2,705 40	633,967 90	15,703 00	531,029 30	61,891 45	206,660 20

FISHERIES

the quantity and value of all fishing materials and other fixtures employed in the during the year 1921.

Fishing material													Other fixtures used in fishing			
Seines			Pound Nets		Hoop Nets		Dip or Roll Nets		Night Lines		Spears		Freezers and Ice Houses		Piers and Wharves	
No.	Yards	Value	No.	Value	No.	Value	No.	Value	No. Hooks.	Value	No.	Value	No.	Value	No.	Value
		$		$		$		$		$		$		$		$
....	.....	.....	54	15,750	43	2,730	....	.....	.....	.....	....	.....	89	24,245	68	13,350
....	.....	.....	62	26,150	1	60	....	.....	4,600	200	....	.....	18	9,015	17	4,275
....	.....	.....	194	110,800	10	440	....	.....	4,500	750	....	.....	34	10,275	30	17,000
12	1,790	1,188	15	89,200	53	1,270	....	.....	29,900	8,392	....	.....	31	12,405	34	8,485
7	810	615	66	37,175	2	100	....	.....	.....	.....	.....	.....	32	6,240	10	1,340
64	10,254	7,667	6	2,125	218	26,235	1	2	2,000	240	1	300	54	18,450	33	7,225
51	16,890	12,550	628	431,150	32	5,500	21	244	7,795	1,607	....	.....	124	141,380	66	23,533
21	2,583	2,205	....	.....	701	23,310	....	.....	15,958	1,099	....	.....	64	9,520	29	3,790
25	2,258	4,876	27	9,200	385	11,892	19	78	13,910	459	115	701	154	9,038	8	3,400
180	34,585	29,101	1,052	721,550	1,445	71,537	41	324	78,663	12,747	116	1,001	600	240,568	295	82,398

of fish caught during the year 1921.

Sturgeon	Eels	Perch	Tullibee	Catfish	Carp	Mixed and coarse fish	Caviare	Pickerel (Blue)	Value
lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	$ c.
1,842	.....	7,865	116,654	51,062	7,585	166,408	25	.....	185,363 76
26,305	.....	.....	300	.....	5,462	72,959	165	15,504	375,259 88
12,903	.....	11,863	50,161	4,109	10,817	411,600	235	.....	273,163 51
2,629	.....	4,435	82,320	13,819	68,727	138,310	20	.....	174,637 43
8,288	.....	127,136	121,048	481	3,518	101,925	4,713	546	122,472 48
11,885	.....	131,304	.....	67,558	316,717	438,073	3,801	160	58,103 16
.....	15,104	1,964,898	68	45,582	345,427	1,071,536	.....	6,366,554	994,939 94
1,798	112,226	87,272	475	183,629	62,867	415,850	103	23,034	396,222 46
69,279	36,482	22,464	500	131,674	259,706	300,096	1,923	100	76,613 20
134,929	163,812	2,357,237	371,526	497,914	1,080,826	3,116,757	10,985	6,405,898	2,656,775 82
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	
16,191 48	16,381 20	188,578 96	22,291 56	39,833 12	43,233 04	124,670 28	10,985 00	384,353 88	2,656,775 82

Comparative Statement of yield for 1920-21, according to Districts

	1920	1921	Increase	Decrease
Kenora and Rainy River Districts:				
Herring, Salted.....lbs.				
Herring, Fresh..... "				
Whitefish, Salted..... "	319,400	700		318,700
Whitefish, Fresh..... "	398,115	384,664		13,451
Trout, Salted..... "		978	978	
Trout, Fresh..... "	123,232	80,342		42,890
Pike..... "	449,457	451,170	1,713	
Pickerel (Dore)..... "	649,044	972,177	323,133	
Sturgeon..... "	9,330	1,842		7,488
Eels..... "				
Perch..... "	12,277	7,865		4,412
Tullibee..... "	129,430	116,654		12,776
Catfish..... "	52,992	51,062		1,930
Carp..... "	9,441	7,585		1,856
Mixed and Coarse..... "	191,209	166,408		24,801
Caviare..... "	379	25		354
Sturgeon Bladders.....No.	198			198
Pickerel (Blue).....lbs.	5,316			5,316
Lake Superior:				
Herring, Salted.....lbs.	616,601	276,535		340,066
Herring, Fresh..... "	1,286,953	424,826		862,127
Whitefish, Salted..... "	200	200		
Whitefish, Fresh..... "	1,704,733	1,497,289		207,444
Trout, Salted..... "	145,700	91,224		54,476
Trout, Fresh..... "	1,332,428	1,512,942	180,514	
Pike..... "	15,271	53,977	38,706	
Pickerel (Dore)..... "	118,779	199,208	80,429	
Sturgeon..... "	30,607	26,305		4,302
Eels..... "	20,496			20,496
Perch..... "				
Tullibee..... "	50	300	250	
Catfish..... "				
Carp..... "		5,462	5,462	
Mixed and Coarse..... "	114,924	72,959		41,965
Caviare..... "	202	165		37
Pickerel (Dore)..... "	7,267	15,504	8,237	
North Channel, Lake Huron:				
Herring, Salted.....lbs.	155	905	750	
Herring, Fresh..... "	24,173	23,734		439
Whitefish, Salted..... "	552	2,250	1,698	
Whitefish, Fresh..... "	902,703	664,996		237,707
Trout, Salted..... "	967	5,110	4,143	
Trout, Fresh..... "	1,107,771	1,589,214	481,443	
Pike..... "	68,500	134,704	66,204	
Pickerel (Dore)..... "	242,003	160,719		81,284
Sturgeon..... "	13,804	12,903		901
Eels..... "				
Perch..... "	8,415	11,863	3,448	
Tullibee..... "	20,712	50,161	29,449	
Catfish..... "	1,730	4,109	2,379	
Carp..... "	17,213	10,817		6,396
Mixed and Coarse..... "	420,791	411,610		9,181
Caviare..... "	138	235	97	
Georgian Bay:				
Herring, Salted.....lbs.	3,650	2,750		900
Herring, Fresh..... "	49,282	61,002	11,720	
Whitefish, Salted..... "	5,900	5,015		885
Whitefish, Fresh..... "	445,351	550,415	105,064	

Comparative Statement of yield for 1920-1921, according to Districts—Continued.

——	1920	1921	Increase	Decrease
Georgian Bay—Continued:				
Trout, Salted.....lbs.....	18,400	17,980	.....	420
Trout, Fresh..... "	972,158	908,966	.....	63,192
Pike..... "	44,164	86,813	42,649	.....
Pickerel (Dore)..... "	67,307	38,551	.....	28,756
Sturgeon..... "	2,655	2,629	.....	26
Eels..... "	.....	.....	.....	.....
Perch..... "	4,098	4,435	337	.....
Tullibee..... "	76,274	82,320	6,046	.....
Catfish..... "	2,415	13,819	11,404	.....
Carp..... "	54,319	68,727	14,408	.....
Mixed and Coarse..... "	43,383	138,310	94,927	.....
Caviare..... "	30	20	.....	10
Lake Huron (Proper):				
Herring, Salted.....lbs.....	7,700	6,100	.....	1,600
Herring, Fresh..... "	172,630	103,891	.....	68,739
Whitefish, Salted..... "	900	6,350	5,450	.....
Whitefish, Fresh..... "	82,194	70,143	.....	12,051
Trout, Salted..... "	56,850	12,095	.....	44,755
Trout, Fresh..... "	790,168	678,082	.....	112,086
Pike..... "	4,995	7,067	2,072	.....
Pickerel (Dore)..... "	139,634	125,223	.....	14,411
Sturgeon..... "	9,176	8,288	.....	888
Eels..... "	.....	.....	.....	.....
Perch..... "	129,157	127,136	.....	2,021
Tullibee..... "	206,029	121,048	.....	84,981
Catfish..... "	227	481	254	.....
Carp..... "	3,988	3,518	.....	470
Mixed and Coarse..... "	99,056	101,925	2,869	.....
Caviare..... "	649	4,713	4,064	.....
Pickerel (Blue)..... "	2,176	546	.....	1,630
Lake St. Clair, Etc.:				
Herring, Salted.....lbs.....	.....	.....	.....	.....
Herring, Fresh..... "	400	325	.....	75
Whitefish, Salted..... "	.....	.....	.....	.....
Whitefish, Fresh..... "	7,327	2,400	.....	4,927
Trout, Salted..... "	.....	.....	.....	.....
Trout, Fresh..... "	.....	.....	.....	.....
Pike..... "	107,576	54,995	.....	52,581
Pickerel (Dore)..... "	26,968	37,598	10,630	.....
Sturgeon..... "	13,004	11,885	.....	1,119
Eels..... "	.....	.....	.....	.....
Perch..... "	231,621	131,304	.....	100,317
Tullibee..... "	.....	.....	.....	.....
Catfish..... "	141,247	67,558	.....	73,689
Carp..... "	395,437	316,717	.....	78,720
Mixed and Coarse..... "	603,136	438,073	.....	165,063
Caviare..... "	526	3,801	3,275	.....
Pickerel (Blue)..... "	400	160	.....	240
Lake Erie:				
Herring, Salted.....lbs.....	.....	.....	.....	.....
Herring, Fresh..... "	9,651,284	5,225,300	.....	4,425,984
Whitefish, Salted..... "	20,000	1,851	.....	18,149
Whitefish, Fresh..... "	818,304	964,648	146,344	.....
Trout, Salted..... "	.....	.....	.....	.....
Trout, Fresh..... "	1,044	637	.....	407
Pike..... "	115,259	96,692	.....	18,567
Pickerel (Dore)..... "	166,013	311,021	145,008	.....

Comparative Statement of yield for 1920-21, according to Districts—Continued

———	1920	1921	Increase	Decrease
Lake Erie—Continued:				
Sturgeon.....lbs.....	267	.....	.....	267
Eels..... "	38,742	15,104	.....	23,638
Perch..... "	1,272,181	1,964,898	692,717	.....
Tullibee..... "	.....	68	68	.....
Catfish..... "	42,051	45,582	3,531	.....
Carp..... "	431,864	345,427	.....	86,437
Mixed and Coarse..... "	900,491	1,071,536	171,045	.....
Pickerel (Blue)..... "	3,354,523	6,366,554	3,012,031	.....
Lake Ontario:				
Herring, Salted.....lbs.....	3,650	2,186	.....	1,464
Herring, Fresh..... "	1,287,580	1,014,419	.....	273,161
Whitefish, Salted..... "	2,950	10,488	7,538	.....
Whitefish, Fresh..... "	2,024,058	2,156,986	132,928	.....
Trout, Salted..... "	3,350	29,543	26,193	.....
Trout, Fresh..... "	458,663	529,302	70,639	.....
Pike..... "	311,432	233,143	.....	78,289
Pickerel (Dore)..... "	36,551	73,305	36,754	.....
Sturgeon..... "	500	1,798	1,298	.....
Eels..... "	91,932	112,226	20,294	.....
Perch..... "	107,383	87,272	.....	20,111
Tullibee..... "	300	475	175	.....
Catfish..... "	170,215	183,629	13,414	.....
Carp..... "	65,674	62,867	.....	2,807
Mixed and Coarse..... "	413,841	415,850	2,009	.....
Caviare..... "	338	103	.....	235
Sturgeon Bladders.....No.....	240	.....	.....	240
Pickerel (Blue).....lbs.....	9,842	23,034	13,192	.....
Inland Waters:				
Herring, Salted.....lbs.....	400	350	.....	50
Herring, Fresh..... "	39,052	23,678	.....	15,374
Whitefish, Salted..... "	.....	200	200	.....
Whitefish, Fresh..... "	71,033	48,138	.....	22,895
Trout, Salted..... "	800	100	.....	700
Trout, Fresh..... "	13,578	10,808	.....	2,770
Pike..... "	107,532	119,268	11,736	.....
Pickerel (Dore)..... "	158,942	148,800	.....	10,142
Sturgeon..... "	109,628	69,279	.....	40,349
Eels..... "	26,408	36,482	10,074	.....
Perch..... "	29,615	22,464	.....	7,151
Tullibee..... "	.....	500	500	.....
Catfish..... "	133,358	131,674	.....	1,684
Carp..... "	130,827	259,706	128,879	.....
Mixed and Coarse..... "	280,579	300,096	19,517	.....
Caviare..... "	3,482	1,923	.....	1,559
Pickerel (Blue)..... "	.....	100	100	.....

STATEMENT OF THE YIELD OF THE FISHERIES OF THE PROVINCE OF ONTARIO FOR THE YEAR 1921 AS FURNISHED BY THE FISHERMEN'S ANNUAL RETURNS

Kind of Fish	Quantity	Price	Value
Herring, Salted.....lbs.....	288,826	$ 05	$ 14,441 30
Herring, Fresh..... "	6,877,175	05	343,858 75
Whitefish, Salted..... "	27,054	10	2,705 40
Whitefish, Fresh..... "	6,339,679	10	633,967 90
Trout, Salted..... "	157,030	10	15,703 00
Trout, Fresh..... "	5,310,293	10	531,029 30
Pike..... "	1,237,829	05	61,891 45
Pickerel (Dore)..... "	2,066,602	10	206,660 20
Sturgeon..... "	134,929	12	16,191 48
Eels.....	163,812	10	16,381 20
Perch..... "	2,357,237	08	188,578 96
Tullibee..... "	371,526	06	22,291 56
Catfish..... "	497,914	08	39,833 12
Carp..... "	1,080,826	04	43,233 04
Mixed and Coarse..... "	3,116,757	04	124,670 28
Caviare..... "	10,985	1 00	10,985 00
Pickerel (Blue)..... "	6,405,898	06	384,353 88
Totals.....			2,656,775 82

COMPARATIVE STATEMENT OF THE YIELD OF THE FISHERIES OF THE PROVINCE.

———	1920	1921	Increase	Decrease
Herring, Salted.....lbs.....	632,156	288,826	.....	343,330
Herring, Fresh..... "	12,511,354	6,877,175	.....	5,634,179
Whitefish, Salted..... "	349,902	27,054	.....	322,848
Whitefish, Fresh..... "	6,453,818	6,339,679	.....	114,139
Trout, Salted..... "	226,067	157,030	.....	69,037
Trout, Fresh..... "	4,799,042	5,310,293	511,251	.....
Pike..... "	1,224,186	1,237,829	13,643	.....
Pickerel (Dore)..... "	1,605,241	2,066,602	461,361	.....
Sturgeon..... "	188,971	134,929	.....	54,042
Eels..... "	177,578	163,812	.....	13,766
Perch..... "	1,794,747	2,357,237	562,490	.....
Tullibee..... "	432,795	371,526	.....	61,269
Catfish..... "	544,235	497,914	.....	46,321
Carp..... "	1,108,763	1,080,826	.....	27,937
Mixed and Coarse..... "	3,067,410	3,116,757	49,347	.....
Caviare..... "	5,744	10,985	5,241	.....
Sturgeon Bladders.....No.....	438	.....	.....	438
Pickerel (Blue).....lbs.....	3,379,524	6,405,898	3,026,374	.....
Total Pounds.....	38,501,533	36,444,372	.....	.....
Total Decrease, Pounds, 1921...	.....	.....	.....	2,057,161

VALUE OF ONTARIO FISHERIES FROM 1901 TO 1921 INCLUSIVE.

Years.	Value. $ c.	Years.	Value. $ c.
1901	1,428,078 00	1911	2,419,178 21
1902	1,265,705 00	1912	2,842,877 09
1903	1,535,144 00	1913	2,674,686 76
1904	1,793,524 00	1914	2,755,293 11
1905	1,708,963 00	1915	3,341,181 41
1906	1,734,865 00	1916	2,658,993 43
1907	1,935,024 90	1917	2,866,424 00
1908	2,100,078 63	1918	3,175,110 32
1909	2,237,544 41	1919	2,721,440 24
1910	2,348,269 57	1920	2,691,093 74
		1921	2,656,775 82

STATEMENT OF THE NUMBER AND VALUE OF THE TUGS, GASOLINE, SAIL OR ROW BOATS, NETS, SPEARS, ETC., USED IN THE FISHING INDUSTRY OF THE PROVINCE OF ONTARIO DURING THE YEAR 1921.

	Number	Value
		$
Tugs (3,007 tons)	116	701,564
Gasoline Launches	924	503,725
Sail or Row Boats	1,109	77,436
Gill Nets	6,181,883 yards	709,859
Seines (34,585 yards)	180	29,101
Pound Nets	1,052	721,550
Hoop Nets	1,445	71,537
Dip or Roll Nets	41	324
Baited Hooks	78,663	12,747
Spears	116	1,001
Freezers and Ice Houses	600	240,568
Piers and Wharves	295	82,398
Total		3,151,810

Number of men employed on Tugs	579
" " " Gasoline Launches	1,779
" " " Sail or Row Boats	1,242
	3,600

ANNUAL REPORT

OF THE

Department of Public Highways

ONTARIO

1921

PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO

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1923

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CANADA

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To His Honour Henry Cockshutt,
Lieutenant-Governor of the Province of Ontario.

May It Please Your Honour:

I herewith beg to present for your consideration the Annual Report of the Department of Public Highways, relating to Highway Improvement in the Province of Ontario during the year 1921.

Respectfully submitted,

F. C. Biggs,
Minister of Public Works and Highways.

To the Honourable F. C. Biggs,
Minister of Public Works and Highways,
Ontario.

Sir,—I have the honour to submit the Annual Report of the Department of Public Highways for the year 1921, having special reference to work on the Provincial Highway System under the Provincial Highways Act; work carried on by the several counties of Ontario under the Highway Improvement Act; and by township councils whose work is now subsidized under the Ontario Highways Act, 1920.

Reference is also made to the operation of the Motor Vehicles Act; and to other services within the purview of the Department of Public Highways.

I have the honour to be, Sir,

Yours respectfully,

W. A. McLean,
Deputy Minister of Highways.

Parliament Buildings, Toronto, April 26th, 1923.

HAMILTON-QUEENSTON PROVINCIAL HIGHWAY

Top—View of right-of-way across Red Hill Creek, east of Hamilton, prior to commencement of work in 1919.

Bottom—View from same location on completion of pavement.

HIGHWAY IMPROVEMENT IN ONTARIO

REPORT OF W. A. McLEAN, DEPUTY MINISTER

THE rural roads of Southern Ontario are now being methodically constructed and improved in a manner that pertains to few countries, and a continuance of which policy will finally result in a completed network of roads serving each farm and every community, and commensurate with the agricultural, commercial and industrial needs of the Province.

To the casual observer, the work on Provincial highways may seem to be of a disconnected and scattered nature. Nevertheless, the work is being carried out under a well defined system, which is steadily producing a continuous trunk-line plan of roads. It is a cardinal principle that roads should be constructed in proportion to the traffic over them. All parts of the Provincial system do not carry an equal amount of traffic. Near cities, traffic is dense, and paved roads are necessary to give service and reduce maintenance costs; in industrial communities, heavy motor truck traffic prevails and strong foundations are essential; on the outer branches of the system, traffic of all kinds is proportionately light, and tarred macadam or even gravel roads are economical and render every essential service. Continuity of Provincial roads is being steadily developed, and what may appear to the general public to be scattered improvements will in a short period be connected into a well standardized system of Provincial highways worthy of the name.

County councils, operating under the Highway Improvement Act, on 9,609 miles of county roads, are carrying out work on a well devised system of leading market roads, which branch from the Provincial highways, local markets and shipping centres.

The result is that, while a large number of farms are directly served on Provincial Highways and county roads, few of the remaining country homes are more than two or three miles away from such main roads. Township effort is thus greatly stimulated in the betterment of short local roads; and township councils and individual effort are now strongly directed to the improvement of what are classed as township roads. That is, property owners who, prior to the construction of the main roads, saw 6, 8 or 10 miles of bad road to be constructed from their farms to the local market, now find that there are only 2 or 3 miles to be graded and gravelled to link them up with an established main road. The result, as previously stated, is a marked stimulus of local effort, with the prospect that in a very few years the network of good roads in Ontario will be complete.

PROVINCIAL HIGHWAYS

The model set by Provincial highways is effecting a marked improvement throughout the Province in the methods of constructing and maintaining township and county roads. Provincial highways have demonstrated to the public, and to municipal councils, the advantages of better grading, better drainage, spreading of gravel, systematic dragging, and other details of construction and maintenance.

Instruction and advice have been given for many years to municipal officers with respect to such matters, but old methods were established from statute labour practice, and had a firm hold on the public mind; and it has been necessary to show and prove, by actual construction and maintenance, the weakness of the methods that have so generally prevailed. Provincial highways are therefore not merely valuable in themselves, but their influence on the remaining roads is of inestimable value to the Province.

During the year construction work was carried out at many points of the Province. In addition extensive maintenance was established over the entire system in an effort to improve those sections which were not to immediately undergo construction in such a manner that they would be in a first-class condition for traffic.

Hamilton-Queenston Provincial Highway
Asphaltic concrete surface, east of Stoney Creek.

A more detailed report of the work done will be found on the following pages. Mention might be made, however, of the following more or less outstanding features of the season's operations.

On the Ottawa-Pembroke Road, south of Cobden, at the southerly end of Muskrat Lake, a fill 4,000 feet long was constructed across the marsh. Six miles of bituminous macadam and 3¾ miles of asphaltic concrete surfaces were constructed on the Ottawa-Point Fortune Road. On the Ottawa-Prescott Road five bridges, work on which had been started in 1920, were completed. Easterly from Kingston on the River Road 9½ miles of waterbound macadam were built. Seven miles of macadam were laid from Belleville to Shannonville. Between Oshawa and Belleville over fifty miles of road were gravelled. South of Peterborough 4.3 miles of macadam base were completed. Easterly from

Brantford a concrete pavement was constructed over a length of 5 miles and the pavement through Cainsville and Echo Place was completed. South from London, to Lambeth, a concrete pavement 5 miles long was built. The surfacing of the Hamilton-Queenston Road progressed rapidly with the completion of 11.3 miles of bituminous macadam surface.

Probably the largest single piece of work on the system was that south of Clappison's Corners, where a rock cut through the Niagara escarpment was necessary in order to strengthen the road and eliminate three very sharp, steep turns. At Clappison's Corners the Hamilton-Guelph and the Hamilton-Toronto Provincial Highways intersect, traffic from both roads reaching Hamilton through this cut.

The new entrance of the Toronto and Hamilton Highway (Lake Shore Road), the Dundas Street Provincial Highway, and the Hamilton-Guelph Provincial Highway, which involves the construction of two long and one short bridges, was carried forward. The bridges were practically completed and the grading of the approaches commenced.

These, and many other pieces of work, were continued or completed, and in addition a large mileage of road was graded, culverts constructed and the permanent work necessary before the final surface could be laid was completed. On many miles of the system gravel was applied, and this, followed by a continuous system of patrol maintenance, resulted in a great improvement in the condition of the surface. The policy of developing the surfaces of these roads to a high standard as rapidly as possible has brought about gratifying results.

COUNTY ROADS

A system of county roads has now been established in every county in the Province. There are approximately 49,874 miles of road in the area covered by the County Road System, of which 54.29 per cent. has been surfaced with gravel, broken stone or other more permanent material; a very creditable record for the municipalities.

Since the passing of The Highway Improvement Act, and to the end of 1921, a total of $36,121,903.97 has been spent on construction and maintenance of county roads, of which the Province has contributed $15,523,047.84. This includes the county expenditure of 1921, on which the Provincial grant was paid in 1922.

The total length of county road systems at the end of 1921 amounted to 9,610 miles, comprising 1,949 miles of provincial county roads and 7,661 miles of county roads. This is approximately 19.26 per cent. of the total road mileage in the area covered by the County Road System.

The following shows the mileage of the various types of road on the County Road System at the end of 1921:

Gravel roads	5,665.0 miles
Water-bound macadam roads	1,878.0 "
Bituminous surfaces	182.0 "
Bituminous penetration roads	94.0 "
Concrete	65.0 "
Asphaltic concrete	13.5 "
Brick	0.5 "
Total	7,898.0 miles

This is approximately 82 per cent. of the road mileage under the County Road System.

Expenditure on county roads in 1921 was as follows:

	Total Expenditure.	Provincial Grant.
Construction		
Provincial County Roads	$2,783,756 21	$1,670,253 73
County Roads	5,429,335 93	2,171,734 37
Total Construction	$8,213,092 14	$3,841,988 10
Maintenance		
Provincial County Roads	$659,081 71	$395,449 03
County Roads	2,206,114 54	882,445 79
Total Maintenance	$2,865,196 25	$1,277,894 82
Summary		
Total Construction	$8,213,092 14	$3,841,988 10
Total Maintenance	2,865,196 25	1,277,894 82
Total Expenditures	$11,078,288 39	$5,119,882 92

The work on which the foregoing expenditures for construction were made included the following:

Grading		187.38 miles
Gravelled surface	218.76	miles
Waterbound macadam	302.62	"
Cement concrete	30.84	"
Bituminous penetration	39.86	"
Asphaltic concrete	4.84	"
Total surfaced		596.92 miles
Bridges over 10 feet span	179	
Concrete slab culverts	428	
Pipe and tile culverts	2,099	

Among the special features of road improvement effected during the year the following works may be mentioned:

BRANT COUNTY

The Brantford-Oakland Toll road was purchased by the county, towards which the Province contributed 40 per cent. Several timber trestle bridges were replaced with concrete box culverts and earth fills, one fill consisting of approximately 12,000 cubic yards of material, the width of grade being 28 feet. In addition 8 miles of road were graded to the standard width of 28 feet and 57 pipe and 7 concrete box culverts were built.

BRUCE COUNTY

In a series of sections, varying in length from 2 to 4 miles, 21 miles of 16-foot gravel road were built and graded to a width of 28 feet. In addition seventeen bridges, varying in span from 16 to 200 feet with 20-foot roadway, were built; also 22 concrete box culverts and 121 pipe culverts. The work of grading and laying a rubble base through the Eastnor swamp is in progress, and an expenditure of $22,597.61 was made during the year.

CARLETON COUNTY

Six toll roads in the vicinity of the city of Ottawa were purchased at a cost of $202,248.13, of which the Province paid 40 per cent. Four miles of 18-foot waterbound macadam, 9 inches deep, were built on Provincial County Road No. 89, known as the Morrisburg road. The work was commenced at the southerly boundary of the county, and is proceeding northerly toward the city of Ottawa and it is expected that in 1922 the work will be linked up with the Ottawa suburban road, thereby providing an excellent and continuous stretch of road for a distance of 26 miles on one of the main highways in the eastern part of the Province. The road is graded to a width of 28 feet and numerous pipe and concrete box culverts were built. A special feature with respect to this work is the elimination of several dangerous corners; this was accomplished by purchasing land for widening and increasing the curvature. On county roads, several stretches of gravel and waterbound macadam roads, varying from

Carleton County Road

Asphaltic concrete surface 20 feet wide on Metcalfe Road, Ottawa Suburban Roads Commission.

one to four miles in length, and amounting to 26 miles, were built. Nine bridges were built at a cost of $78,846.36, the most important structures being the Carlsbad Springs bridge, the Steven's Creek bridge, the Kenmore bridge and Burritt's Rapids bridge, consisting of 50-foot, 60-foot, 50 and 72-foot (2 spans) and two 100-foot spans respectively. The bridges are of steel superstructure and concrete substructure.

ELGIN COUNTY

The Silver Creek bridge, 16-foot span and 100 feet wide, was built on County Road No. 42, township of Malahide. Approximately 15,000 cubic yards of earth was used as fill on this bridge. The chief feature, however, is the maintaining of the gravel roads. Excellent results are obtained at a very low cost. Approximately 150 miles of gravel roads were resurfaced during the year.

ESSEX COUNTY

Two sections of 18-foot concrete pavement were built; 1.20 miles westerly from the village of Belle River and 0.70 miles easterly from Pike Creek on Provincial County Road No. 86. On County Road No. 31 an 18-foot concrete pavement one mile in length was built, extending northerly from the limit of the town of Leamington. On Provincial County Road No. 77 a 3-inch tar penetration surface on a 6-inch stone base 18 feet wide and 1 mile long was built through the police village of Harrow. In addition, 40 miles of gravel road were built in stretches varying from 1½ to 9 miles long.

GREY COUNTY

Eight miles of water-bound macadam road, 18 feet wide and 10 inches deep, were built on the Owen Sound-Thornbury road. In connection with this work unusual difficulties arose and it was necessary to reduce many grades, building the road through low-lying land and straightening the road in many places.

Essex County Road
Bituminous macadam surface 24 feet wide in the village of Harrow.

In the vicinity of Rock Mills and Priceville, 7 miles of gravel road were built; also 12 miles of gravel road from Hanover to Clifford.

HALDIMAND COUNTY

Over 40 miles of road were graded to the standard width of 26 feet; also the road between Hagersville and Selkirk, 10.5 miles long, was given a 4-inch coat of crushed stone and the travelled surface widened to 14 feet. Three sections of gravel road, 2, 4 and 5 miles in length and totalling 11 miles, were constructed.

HALTON COUNTY

On a section of the Oakville-Georgetown road, 4 miles of 10-foot concrete pavement with 4-foot stone shoulders were built. The road was graded to a width of 28 feet. The county, in a series of sections, constructed, in all, 20 miles of water-bound macadam road 10 to 16 feet wide.

HURON COUNTY

The completion of the Grand Bend bridge over the Aux Sables river between the counties of Huron and Lambton; the building of 10.5 miles of gravel road in sections varying from 2 to 4 miles, graded to a width of 26 feet; and the resurfacing of approximately 180 miles of gravel roads were the main features of the year's work.

KENT COUNTY

On the Wallaceburg-Dresden road the 16-foot concrete pavement commenced in 1920 was extended a distance of 2½ miles on the Wallaceburg end and 2 miles on the Dresden end. It is expected that the remaining 5 miles of this road will be completed in 1922, thereby providing a concrete pavement between the towns of Wallaceburg and Dresden, a distance of 12 miles. On the Dresden-Thamesville road, a 16-foot concrete pavement 2½ miles long was built extending westerly from the C. P. R. North Thamesville station. On County Road No. 8, in the vicinity of Paincourt, a 16-foot concrete pavement, 1½ miles long, was built and linking up with the concrete pavement built by the Chatham Suburban Roads Commission. Approximately 21 miles of tile under-drains were laid during the year. Three bridges were built, consisting of 18, 50 and 70-foot span with 20-foot roadways. In addition, 25 miles of roads were gravelled.

LAMBTON COUNTY

Grade reduction at several points and the building of four bridges varying in span from 20 to 90 feet with 18-foot roadways were completed.

LANARK COUNTY

On the Perth-Lanark road, from Perth northerly to Balderson, 2½ miles of 3-inch tar penetration surface on 8-inch stone base 16 feet wide were built and the road graded to a width of 28 feet. In addition 15 pipe and 12 concrete box culverts were built. On county roads, in a series of sections varying from 1¼ to 5½ miles, 14.50 miles of water-bound macadam road were constructed with a width of 12 feet.

LINCOLN COUNTY

Several sections of water-bound macadam road were built, varying in length from 1 mile to 4½ miles and totalling 16 miles. In addition, 3 miles of gravel road were built on the lake road between Port Dalhousie and Niagara-on-the-Lake. Three bridges were built, the chief one being a 54-foot span with a 20-foot road over the Four-mile Creek. Two hundred and sixty-one pipe and 6 concrete box culverts were also built.

LENNOX AND ADDINGTON

One mile of water-bound macadam road, 16 feet wide and 10 inches deep, was built on the Hamburg road. The right-of-way was widened from 40 to 66 feet. Two stretches of water-bound macadam road, 2½ miles at 16 feet wide and 3 miles at 10 feet wide, were built on the Yarker road.

MIDDLESEX COUNTY

Twelve miles of gravel roads were constructed in a series of sections varying in length from 1½ to 4 miles, together with the resurfacing of approximately 125 miles. The Bear Creek bridge in the township of Lobo, having a clear span of 54 feet with a 20-foot roadway, was the chief structure erected during the year.

NORFOLK COUNTY

On the Simcoe-Port Dover road, a 3-inch tar penetration surface on a 6-inch stone base 16 feet wide was built, extending from the limit of Port Dover easterly 3½ miles. This completes this type of road between the towns of Simcoe and Port Dover, a distance of 7 miles. In addition, 1½ miles of a similar road were built in the vicinity of Port Rowan. Four miles of gravel road were built on County Road No. 17, extending westerly from Vanessa station. A 55-foot span bascule bridge with a 16-foot road and 6-foot sidewalk was built over the River Lynn at Port Dover at a cost of $77,344.66.

UNITED COUNTIES OF PRESCOTT AND RUSSELL

On the Hawkesbury-Vankleek Hill road 5½ miles of 3 inch asphalt penetration surface on 6-inch stone base 16 feet wide were built. On the Vankleek Hill-St. Eugene road, a similar type of road was built, 5 miles long. In a series of sections, 20 miles of water-bound macadam road 16 feet wide were built. In addition, 59 pipe and 31 concrete box culverts were built; also eleven bridges varying in span from 16 to 40 feet with 18-foot roadways.

RENFREW COUNTY

The county, in a series of sections, constructed 46 miles of water-bound macadam and gravel roads 10 to 16 feet wide; also 7 miles of road were graded ready for a stone surface. In addition, 171 pipe culverts were laid and 36 concrete box culverts and 7 bridges built.

SIMCOE COUNTY

Two miles of 3-inch tar penetration surface on 6-inch stone base 18 feet wide were built on the Penetang road, extending southerly from the limit of the town of Penetang. A part of the Orillia-Atherly road was constructed with water-bound macadam 20 feet wide, and given a surface treatment of tar and sand. Thirteen bridges were also built, varying in span from 16 to 60 feet, with 20-foot roadways; the bridges have steel superstructures.

UNITED COUNTIES OF STORMONT, DUNDAS AND GLENGARRY

Sixty miles of water-bound macadam roads were built in a series of sections, varying in length from 1 mile to 6½ miles, and from 10 to 16 feet wide. In addition, 33 concrete box culverts and 4 bridges were built.

VICTORIA COUNTY

The construction of 2¼ miles of 16-foot water-bound macadam road 10 inches deep on the Lindsay-Omemee road; grade reductions in several locations, and the elimination of two railway crossings on the Lindsay-Peterborough road were the chief works for the year.

WATERLOO COUNTY

Three and one-half miles of concrete pavement 16 feet wide were built on the Elmira road. It is expected that the remaining 2 miles, together with the section of road within the town of Waterloo, will be completed in 1922, providing a continuous stretch of concrete pavement between the city of Kitchener and the village of Elmira. A further improvement on this road was carried out at St. Jacob's Hill, where the grade was reduced, the road widened and gravelled and a concrete retaining wall and gutter built. A 54-foot span bridge was built on County Road No. 25 at a cost of $7,600.00.

WELLAND COUNTY

Seven miles of 16-foot water-bound macadam road 10 inches deep were built on the Port Colborne-Marshville road, and the road graded to a width of 28 feet. With this important link constructed, a continuous stretch of hard surface road is provided, extending from Fort Erie in the east to the town of Simcoe in the west. Between Fort Erie and Ridgeway 6 miles of 16-foot tar penetration surface were built; a continuation of the work commenced in 1920. On the Thorold stone road 2½ miles of 3-inch tar penetration surface 16 feet wide were built; also 14 miles of water-bound macadam in a series of sections were built at a width of 10 feet.

GENERAL

The work in the remaining counties consisted chiefly in reshaping and maintaining the existing roads, building permanent structures and otherwise preparing for future work.

SUBURBAN ROADS

A provision is made under the Ontario Highways Act, that a city may co-operate with the county council in improving the leading county roads adjacent to the city and thereby obtain a more substantial type of construction for such suburban roads.

For construction and maintenance of roads which are County Roads the Province contributes 40 per cent. and the County and City each 30 per cent., and on Provincial County Roads, the Province contributes 60 per cent. and the County and City each 20 per cent.

The section of County Road designated as "Suburban" remains a County Road for which the County is responsible; the work of construction and maintenance is carried on under the direction of an engineer appointed by the Commission or may be carried on under the direction of the County Road superintendent, but subject to the instruction of the Commission.

The development of main highways has, in every country, required the co-operation of cities. In the United States, the City of Detroit is paying approximately 87 per cent. of the cost of roads in Wayne County. In New York State, the cities are paying 70 per cent. of the State expenditure.

Under the system of taxation in vogue in the United States, a much larger proportion of the cost of main highways is met by the cities than is provided in Ontario. Provision is made that the rate to be levied upon a city for suburban roads is one-half mill on the dollar, but a city council may by by-law, passed by at least two-thirds of the members present and voting thereon, appropriate

for work on suburban roads a sum not exceeding the proceeds of a rate of two mills on the dollar on the value of the rateable property in the city.

Eighteen cities of the twenty-one within the organized counties of the Province are now paying towards the construction and maintenance of suburban roads. The eighteen commissions appointed have assumed 551 miles of road. The expenditure on suburban roads in 1921 amounted to $1,822,765.22, of which the cities paid $484,428.67.

It is anticipated that the three remaining cities, Stratford, Belleville and Woodstock, will co-operate with their counties in the near future in improving the leading county roads adjacent to the cities.

Several of the Suburban Roads Commissions in the Province have done good work during 1921. Some have adopted the principle of building permanent pavements, others again are reshaping, widening and strengthening the existing macadam or gravel roads with the view of laying a permanent surface in the near future. The construction of permanent pavements and structures on suburban roads in the close vicinity of the city should be encouraged by all Suburban Commissions. The Ottawa Suburban Roads Commission has obtained excellent results by adopting the plan of building and preparing for permanent surfaces.

The main features of construction work carried out on Suburban Roads during 1921 are as follows:

TORONTO AND YORK ROADS COMMISSION

The City of Toronto contributes to the entire county road system; the direction of the work, however, is under control of the Commission. Through the towns of Newmarket and Weston, an asphaltic concrete surface 3 inches thick on a 6-inch concrete base and 2⅓ miles long and 20 feet wide was built. On the Vaughan and Kennedy roads two sections of tar penetration roads 16 feet wide were built. In a series of sections, the Commission constructed 19 miles of water-bound macadam road 16 feet wide and the surface given a treatment of tar and sand. On the Don Mills road, a 90-foot concrete bowstring arch bridge with a 20-foot roadway was built over the Don river. The abutments for the Crousberry bridge were completed at a cost of $18,226.17. The depth to which the footing had to be carried made this a very difficult and expensive piece of work.

OTTAWA SUBURBAN ROADS COMMISSION

The Commission constructed 12½ miles of water-bound macadam road, 20 feet wide and 7 inches deep, in preparation for a permanent type of surfacing. Nine miles of this work was carried out on the Metcalfe road, one of the most important roads in eastern Ontario. In addition, 30 concrete box culverts and 6 bridges were built, the Saw-Mill Creek bridge being the chief feature. This is a 16-foot concrete arch 70 feet wide and was built at a cost of $13,393.00. Twenty-one miles of macadam roads were treated with tar and sand.

BRANTFORD SUBURBAN ROADS COMMISSION

On the Burford road, 1.63 miles of concrete pavement 9 feet wide were built, commencing at the limit of the city of Brantford. The concrete pavement was laid on the north side of the road and a 10-foot strip of gravel road laid on the south side adjoining the concrete pavement. This arrangement has given excellent results and permits of a larger mileage of permanent pavement

being built. Extensive grading operations are in progress on the Cockshutt road, where grades are being reduced to a minimum and the road widened to 28 feet.

WINDSOR SUBURBAN ROADS COMMISSION

Three miles of 18-foot concrete pavement were built on Howard avenue; also two miles of grading and gravelling on County Road No. 6. An extensive programme of paving is proposed for 1922.

KINGSTON SUBURBAN ROADS COMMISSION

The chief feature of construction was the building of 2½ miles of water-bound macadam road 16 feet wide on the Finger Board road; also several concrete culverts.

Owen Sound County Suburban Road

This surface consists of a central strip of concrete pavement 9 feet wide with two 5-foot macadam shoulders. Total width of roadway 30 feet.

OWEN SOUND SUBURBAN ROADS COMMISSION

Grade reduction and widening in several places and the building of 2 miles of water-bound macadam road 16 feet wide on the Shallow Lake road were the chief points of construction carried out.

CHATHAM SUBURBAN ROADS COMMISSION

On the Chatham-Charing Cross road, 3 miles of concrete pavement 18 feet wide were built, and the road graded to a width of 28 feet. One mile of concrete pavement 16 feet wide was built on the River road west from Chatham.

ST. CATHARINES SUBURBAN ROADS COMMISSION

Two miles of concrete pavement 18 feet wide were built on Niagara street; also ½ mile of asphaltic concrete surface on a stone base 18 feet wide. On the mountain section of the Merritton road, a strip of concrete 1,800 feet long and 9 feet wide with 6-inch concrete curb was built.

KITCHENER SUBURBAN ROADS COMMISSION

From the limit of the city of Kitchener to Bridgeport, 1¼ miles of concrete pavement 20 feet wide were built.

NIAGARA FALLS SUBURBAN ROADS COMMISSION

One and one-half miles of 16-foot tar penetration surface on stone base was built on the Thorold stone road.

WELLAND SUBURBAN ROADS COMMISSION

One mile of water-bound macadam road 18 feet wide was built on the Crowland road.

TOWNSHIP ROADS

The total approved expenditure on township roads in 1921 amounted to $3,465,850.33, and as provided by The Ontario Highways Act, 1920, subsidies amounting to $708,486.91 were paid, being 20 per cent. of the cost of construction, maintenance, bridges, machinery, etc., and 40 per cent. of the cost of superintendence. This expenditure relates to two hundred and ninety-four townships taking advantage of the aid, being 80 per cent. of the total number eligible for the grant. The expenditure on maintenance amounted to $1,888,048.75, averaging approximately $65.00 per mile; road construction, including culverts, cost $844,829.42.

Apart from the actual financial assistance to the extent of $708,486.91, the assistance and co-operation of the engineers of the Department have been of untold value to the townships and are having a marked effect upon the nature of township road improvement throughout the Province. In bridge and culvert construction, in the elimination of dangerous curves, brush obstructions, narrow fills, and like matters, the impetus towards prompt action and the advice and guidance in the matter of methods and costs have been found to be sound and worthy of adoption. The construction of culverts 12 and 14 feet long is, in most townships, a practice of the past. The safety, durability and economy of the Departmental type, 24 feet in length, is steadily gaining favour.

The amount of $501,650.14 was expended during the year on township bridges, the plans and specifications for which were approved by the Department. The structures, for the most part, ranged from 14 to 60 feet in span.

Generally the method of keeping account of road expenditures is far from adequate. The practice of many townships of keeping one general account book in which are entered all receipts and payments, often irrespective of the nature of the entry, creates a serious difficulty at the close of the year, as the township treasurer has the unenviable task of segregating road expenditures and of distributing them to the roads concerned in accordance with the requirements of the regulations of the Department. A standardization of road accounting—a much needed improvement—is likely to be adopted, as it is of vital importance to adequate records of township road work.

Approximately two hundred townships have abolished or commuted statute labour and are systematically improving their roads in such a manner and at such a favourable cost in comparison with those townships where the old system is still in vogue, that the latter are openly discussing the statute labour question and it is likely to be disposed of before many years. An actual ex-

amination of the situation in townships in the counties of Bruce, Huron, Oxford, Perth and Waterloo has shown that roads kept up by the statute labour system are costing between two and three times as much to maintain as roads that are attended to on the basis of paying a fair wage for services rendered.

The appointment of a township road superintendent, so strongly advocated by this Department, has been vindicated in one hundred and fifty townships. In 1921, the expenditure on superintendence amounted to $76,585.03, of which the Province paid 40 per cent., or $30,634.01. Some superintendents are handicapped in their duties by a prevailing tendency on the part of the council to leave all road matters in the hands of the councillor representing each division of the township. Also in a number of townships retaining statute labour, there is a division of authority between the pathmaster and the superintendent. Generally, however, these contentious matters are on the wane and the functions of the township road superintendent becoming more definitely solved. Some of them have established patrol systems which are beginning to emulate the best practice in county road work, namely, every mile patrolled.

While there is still room for much improvement in township road systems generally, the work of the year (the second year in which the 20 per cent. subsidy has been operative) has indicated that the municipalities have a clearer conception than before of the relationship between cost and actual results, as well as of the difference between a temporary job and a lasting improvement.

REGISTRATION OF MOTOR CARS

Every motor car used on the roads of the Province is registered in the Motor Vehicles Branch of the Province. This registration includes the name, address and occupation of the owner; a description of the car, comprising make, model, engine and serial numbers, and other particulars. With each registration is issued a permit card, and two number plates, one for the front, the other for the rear of the car. Notice of transfer of ownership must also be filed in the Department. The purposes of this registration with these particulars are important, and relate not merely to the payment of the annual license fee and collection of revenue. Other objects are:

1. Traffic law enforcement; for which the use of number plates on all cars, with an up-to-date list of owners, is essential.

2. Criminal law enforcement; there are few crimes with which motor cars may not be associated, and means of tracing the movement of cars is thus invaluable.

3. The tracing of stolen cars, in which the information regarding engine numbers and the serial number of the car is especially valuable.

4. Finding the owners of cars which have been left on the roadside or elsewhere by joy-riders.

While the information required on the annual application form may seem excessive, the purpose is largely in the interest of car owners, for the protection of their traffic rights, and to aid in the recovery of stolen cars.

MOTOR TRUCKS

The growing use of heavy motor trucks is a matter of much concern to those in charge of the construction and maintenance of roads. While rapidly moving passenger cars, with pneumatic rubber tires, are requiring special treatment of road surfaces—cement concrete, asphalt, tar, oil, calcium chloride, etc.—the heavy motor truck, if unrestricted, is placing an impossible weight and stress on road foundations. When the foundation is shattered or disturbed, the disruption of the surface follows.

Trucks ordinarily carry a little more than their own weight. The present law of the Province permits a gross vehicular load of twelve tons, including the weight of the vehicle and load; so that the present load limitation recognizes what is known as the "five ton truck"—a truck which itself weighs about five tons, and which is commonly loaded with an additional weight of six or seven tons. The registration of trucks for the year shows that there was only one truck in the Province with a carrying capacity of 7 tons; two which had a rated capacity of 6½ tons; ten with a registered capacity of 6 tons; ten carrying 5 tons, and a total of only twenty-three registered, over 5 tons.

Steel tires on motor trucks are wholly prohibited by Ontario law. Resilient tires are required, which permits the use of both solid rubber and pneumatic tires. The later have a cushioned effect which is favourable to the road; solid rubber tires, when used after they are worn or broken, are extremely damaging to the road.

Regulation of motor trucks should tend to a reduction of weight, careful control of speed, the encouragement of pneumatic tires as opposed to solid tires, and a penalty for the use of defective rubber tires.

The numbers of the various classes of motor vehicles, dealers, chauffeurs and garages registered during the year 1921 were as follows:

Passenger Automobiles	181,978
Motor Trucks	19,554
Motor Cycles	4,989
Trailers	1,362
Manufacturers and Dealers	1,543
Chauffeurs	21,808
Garages	2,495

REPORT ON PROVINCIAL HIGHWAYS

By the CHIEF ENGINEER

TORONTO, January 30th, 1922.

W. A. McLEAN, ESQ.,
Deputy Minister of Highways, Ontario.

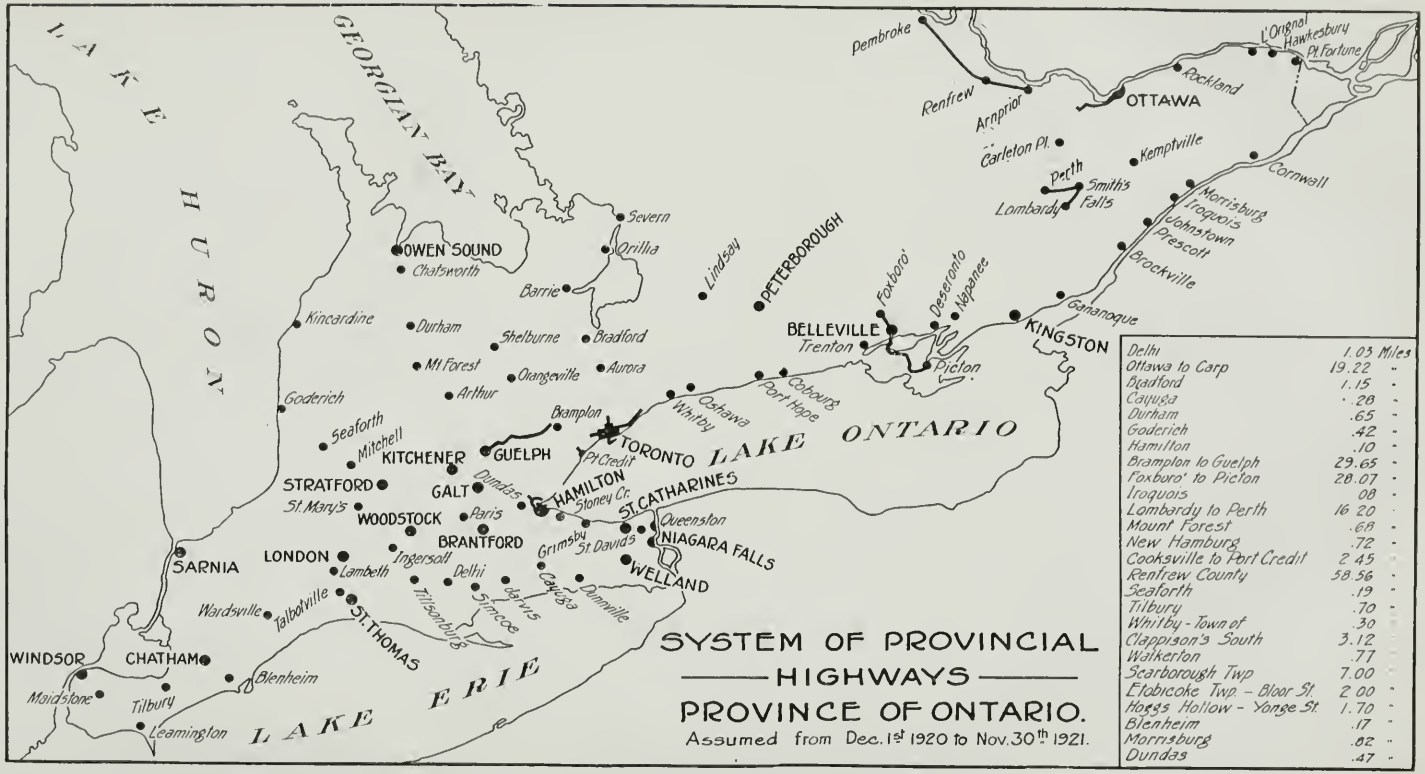
DEAR SIR:

I have the honour to report upon the work of constructing and maintaining the Provincial Highway System in the Counties of Ontario for the year beginning December 1st, 1920, and ending November 30th, 1921.

On December 1st, 1920, the system comprised a total mileage of 1,604.13 miles, as shown on Map No. 1. During the year the system was extended by adding 178.72 miles assumed, less 17.05 miles reverted, as shown on map No. 2, making a total assumed of 1,765.80 miles. A list of the roads added to the system, together with the mileage and date of designations, is as follows:

PROVINCIAL HIGHWAYS ASSUMED IN 1921

County.	Date of Designation.	Municipality.	Mileage.	County Mileage.
Bruce	20th of April, 1921	Walkerton Town	.77	.77
Carleton	16th of November, 1921	Huntley	2.75	.....
	16th of November, 1921	March	6.15	.....
	16th of November, 1921	Nepean	10.32	19.22
Dundas	16th of December, 1920	Morrisburg Village	.82	.....
	16th of December, 1920	Iroquois Village	.08	.90
Grey	6th of April, 1921	Durham Town	.65	.65
Haldimand	4th of May, 1921	Cayuga	.28	.28
Halton	4th of May, 1921	Esquesing	9.1	.....
	4th of May, 1921	Georgetown Town	1.3	.....
	4th of May, 1921	Acton Town	.50	.....
	4th of May, 1921	Nassagaweya	2.95	13.85
Hastings	18th of May, 1921	Thurlow	5.7	5.70
Huron	16th of December, 1920	Seaforth Town	.42	.....
	16th of December, 1920	Goderich Town	.19	.61
Kent	16th of December, 1920	Tilbury Village	.70	.....
	24th of August, 1921	Blenheim Village	.17	.87
Lanark	27th of April, 1921	North Elmsley	9.68	.....
	27th of April, 1921	Drummond	1.32	11.00
Leeds	27th of April, 1921	South Elmsley	5.20	5.20
Norfolk	20th of July, 1921	Delhi Village	1.03	1.03
Ontario	24th of August, 1921	Whitby Town	.30	.30
Peel	7th of May, 1921	Brampton Town	.05	.....
	27th of April, 1921	Chinguacousy	5.10	.....
	16th of March, 1921	Toronto	2.45	7.60
Perth	16th of December, 1920	Mitchell Town	.48	.48
Prince Edward	18th of May, 1921	Bloomfield Village	1.71	.....
	18th of May, 1921	Hallowell	7.79	.....
	18th of May, 1921	Sophiasburg	4.95	.....
	18th of May, 1921	Ameliasburg	7.77	.....
	18th of May, 1921	Bay of Quinte	1.15	23.37
Renfrew	15th of June, 1921	McNab	13.14	.....
	15th of June, 1921	Horton	7.47	.....
	15th of June, 1921	Admaston	4.01	.....
	15th of June, 1921	Ross	15.56	.....
	15th of June, 1921	Westmeath	12.91	.....
	15th of June, 1921	Pembroke	5.47	58.56
Simcoe	18th of May, 1921	Bradford Village	1.15	1.15
Waterloo	27th of April, 1921	New Hamburg Village	.72	.72
Wellington	20th of July, 1921	Mount Forest	.68	.....
	27th of April, 1921	Eramosa	6.70	.....
	27th of April, 1921	Guelph	4.00	11.38
Wentworth	12th of January, 1921	Hamilton City	.10	.....
	12th of January, 1921	West Flamboro	.88	.....
	12th of January, 1921	East Flamboro	2.24	.....
	24th of August, 1921	Dundas Town	.47	3.69
York	16th of March, 1921	York	.30	.....
	16th of March, 1921	Etobicoke	2.41	.....
	14th of September, 1921	York	.25	.....
	14th of September, 1921	Scarborough	6.73	.....
	14th of January, 1921	North York	1.70	11.39
			Total	178.72


LAKE HURON
GEORGIAN BAY
LAKE ONTARIO
LAKE ERIE
Pembroke
Renfrew
Arnprior
OTTAWA
L'Orignal
Hawkesbury
Pt. Fortune
Rockland
Carleton Pl.
Kemptville
Perth
Smith's Falls
Lombardy
Cornwall
Morrisburg
Iroquois
Johnstown
Prescott
Brockville
Gananoque
KINGSTON
BELLEVILLE
Trenton
Foxboro'
Deseronto
Napanee
Picton
PETERBOROUGH
Lindsay
Severn
Orillia
Barrie
OWEN SOUND
Chatsworth
Kincardine
Durham
Shelburne
Bradford
Mt Forest
Orangeville
Aurora
Arthur
Goderich
Seaforth
Mitchell
KITCHENER
GUELPH
Brampton
Pt. Credit
TORONTO
Oshawa
Whitby
Cobourg
Port Hope
STRATFORD
GALT
Dundas
HAMILTON
Stoney Cr.
ST. CATHARINES
St. Mary's
WOODSTOCK
Paris
BRANTFORD
Grimsby
St. David's
Queenston
NIAGARA FALLS
WELLAND
SARNIA
LONDON
Lambeth
Ingersoll
Delhi
Tillsonburg
Simcoe
Dunnville
Wardsville
Talbotville
ST. THOMAS
WINDSOR
CHATHAM
Blenheim
Maidstone
Tilbury
Leamington
SYSTEM OF PROVINCIAL
HIGHWAYS
PROVINCE OF ONTARIO.
Assumed from Dec. 1st 1920 to Nov. 30th 1921.
Delhi 1.03 Miles
Ottawa to Carp 19.22 "
Bradford 1.15 "
Cayuga .28 "
Durham .65 "
Goderich .42 "
Hamilton .10 "
Bramplon to Guelph 29.65 "
Foxboro' to Picton 28.07 "
Iroquois .08 "
Lombardy to Perth 16.20 "
Mount Forest .68 "
New Hamburg .72 "
Cooksville to Port Credit 2.45 "
Renfrew County 58.56 "
Seaforth .19 "
Tilbury .70 "
Whitby - Town of .30 "
Clappison's South 3.12 "
Walkerton .77 "
Scarborough Twp 7.00 "
Etobicoke Twp. - Bloor St. 2.00 "
Hoggs Hollow - Yonge St. 1.70 "
Blenheim .17 "
Morrisburg .82 "
Dundas .47 "

Map No. 1

Reversions from December 1st, 1920, to November 30th, 1921.

	Miles.	Miles.
Leeds County—S. Elmsley Township	3.5	
Lanark County—N. Elmsley Township	6.25	
		9.75
Carleton County—Huntley	6.6	
—Goulburn	.7	
		7.3
		17.05

The System of Provincial Highways as on November 30th, 1921, and including all roads assumed, is shown on Map No. 3.

Traffic development in the vicinity of all cities had brought such a load on older types of road surfaces that rebuilding and construction of satisfactory pavements was imperative. Plans were therefore prepared for the paving of sections of highway adjacent to cities and requiring urgent attention, so that by the close of the year the cities of Toronto, Hamilton, Ottawa, London, Belleville, Kingston, Sarnia, Windsor, Guelph, Stratford, Brantford and Chatham had each been provided with paved sections of Provincial Highways leading directly away from the end of city pavements.

In localities where stone could be conveniently obtained and where it was advisable to permit settlement of new roadway embankments, a type of road surface adaptable to such work was used and macadam base courses constructed. Upon these base courses, when properly packed by time and traffic, higher types of surfaces may be placed in the future as conditions warrant. In all almost 129 miles of base course was laid.

Gravel roads were maintained by dragging and the application of further light layers of gravel, and under this system about 526 miles were gravelled to provide the necessary material for smoothing out the surface.

The construction of the full width of travelled portion of roadway was proceeded with on portions requiring grading and ditching and this work resulted in the completion of subgrade on 351.41 miles of the system. Many narrow sections of highway were thus widened to full width, making the road safer for vehicular traffic.

A summary of work done in the various counties is as follows:

CONSTRUCTION COMPLETED ON PROVINCIAL HIGHWAYS, 1921

County.	Miles of Poles moved.	No. of Culverts built	No. of Bridges built	Miles of Grading	Miles of Gravelling	Miles of W.B. Macadam Base	Miles of W.B. Macadam 2-Course	Miles of Bit. Macadam	Miles of Asphaltic Concrete.	Miles of Concrete Pavement	Lin. ft. of Guard Rail	Miles of Trees planted	Lin. ft. of Storm Sewers laid	Miles of Cobble Base	Miles of Surface Treatment	Miles of Gravel Rd. Mtce.	Miles of Clay Road Mtce.	Miles of Macadam Road Mtce.	Miles of Sand Road Mtce.	Miles of Old Fence moved back	Miles of New Fence erected
Brant	8.5	7	.....	10.7	0.7	.....	.....	.....	.....	6.9	.....	.....	.....	.....	4.3	14.4	.....	.....	.....	7.0	7.0
*Brant and Oxford	2.0	13	.....	0.7	8.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8.5	.....	.....	.....	.....	0.4
Bruce	.....	8	2	1.3	19.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Carleton	1.0	91	1	20.7	15.1	8.6	0.6	.....	3.8	.....	7,513	30.4	.....	.....	2.1	35.0	1.7	16.9	.....	15.7	3.1
Dufferin	.....	22	.....	9.5	11.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	16.6	.....	.....	.....	4.7	0.1
Dundas	3.5	10	.....	4.3	0.5	4.0	.....	.....	.....	.....	.....	1.7	.....	.....	5.0	8.0	.....	7.5	.....	0.8	.....
Durham	1.3	18	.....	7.7	22.8	.....	.....	.....	.....	.....	2,000	20.1	.....	.....	5.0	32.1	.....	.....	.....	8.2	5.0
*Durham and Northumberland	.....	15	1	3.5	3.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8.3	.....	.....	.....	.....	.....
*Durham and Peterboro	.....	8	.....	2.0	2.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3.0	.....	.....	.....	.....	.....
Elgin	.....	43	.....	11.7	23.4	.....	.....	.....	.....	.....	5,217	.....	.....	.....	.....	48.4	.....	.....	.....	.....	4.4
Essex	.....	19	.....	12.3	41.2	.....	.....	.....	.....	3.5	.....	.....	.....	.....	.....	51.4	.....	.....	.....	1.6	3.0
Frontenac	1.8	61	.....	5.2	1.5	.....	9.5	.....	.....	.....	.....	6.0	.....	.....	10.7	19.9	.....	13.7	.....	6.7	0.3
Glengarry	.....	14	.....	13.3	1.6	7.0	.....	.....	.....	.....	.....	3.7	.....	1.0	0.8	.....	.....	8.5	.....	6.8	8.6
Grenville	11.0	36	.....	5.0	1.4	8.9	.....	.....	.....	.....	.....	58.0	.....	.....	5.0	24.4	3.8	7.2	.....	7.8	1.7
Grey	.....	13	1	0.7	2.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.5	53.5	.....	.....	.....	.....	0.7
Haldimand	.....	137	.....	14.7	.....	11.4	0.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	6.5	24.0	.....	.....	.....
Halton	.....	77	1	9.5	2.7	5.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hastings	.....	30	2	17.9	14.7	3.7	4.8	.....	.....	.....	.....	.....	1,500	.....	5.6	17.9	.....	9.3	.....	3.8	5.3
Huron	.....	80	.....	4.2	9.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	24.4	.....	.....	.....	1.0	.....
Kent	.....	24	.....	10.4	37.0	.....	.....	.....	.....	0.7	.....	.....	.....	.....	.....	56.3	30.2	.....	.....	0.9	.....
Lambton	.....	39	.....	2.2	29.1	.....	.....	.....	.....	2.4	.....	.....	.....	.....	.....	31.6	.....	.....	.....	.....	.....
Lanark	.....	4	.....	0.4	.....	0.4	.....	0.9	.....	.....	.....	.....	.....	.....	4.0	.....	.....	36.2	.....	.....	3.8
*Lanark and Carleton	.....	5	.....	1.5	.....	1.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3.0
Leeds	23.0	50	.....	9.6	7.6	4.3	.....	4.0	.....	.....	.....	14.5	.....	.....	3.0	3.0	.....	17.5	.....	5.0	1.0
Lennox and Addington	0.5	.....	1	0.8	.....	4.0	0.3	.....	.....	.....	.....	3.5	.....	.....	9.5	.....	.....	13.5	.....	3.7	0.5
Lincoln	.....	21	.....	2.8	.....	14.3	.....	10.4	.....	.....	3,465	8.0	.....	.....	21.0	.....	.....	26.5	.....	.....	1.4
Middlesex	.....	136	1	21.5	65.8	.....	.....	.....	.....	5.7	1,100	.....	2,200	.....	3.4	86.4	.....	.....	.....	.....	.....
Norfolk	12.3	.....	.....	7.5	21.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	30.5	.....	.....	.....	1.0	4.9
Northumberland	2.1	14	.....	7.7	15.9	.....	.....	.....	.....	.....	.....	15.0	1,615	.....	.....	39.9	.....	.....	.....	20.9	.....
Ontario	.....	9	1	5.7	1.5	11.1	3.5	.....	3.5	.....	1,200	18.0	.....	.....	9.3	9.1	.....	8.6	.....	2.0	10.0
Oxford	0.6	31	1	7.1	9.8	2.3	.....	.....	0.4	.....	.....	.....	.....	.....	2.0	20.2	.....	.....	.....	.....	8.5
*Oxford and Middlesex	.....	.....	.....	.....	0.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.8	.....	.....	.....	.....	.....

Peel	....	49	.....	11.2	24.2	2.5	.....	.....	5.0	.....	.....	.....	.....	.....	.....	18.0	.....	.....	.....	.....	.....
Perth	....	62	3	11.6	34.5	2.1	.....	.....	3.8	.....	.....	.....	.....	.....	2.0	27.8	.....	.....	.....	.....	.....
Peterboro	....	14	.....	4.5	0.5	4.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	5.2	.....	.....	.....	0.0	0.5
Prescott	.....	111	.....	4.0	5.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	31.7	2.0	4.7	16.0	.....
Prince Edward	.....	.....	.....	.....	7.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4.0	.....	.....	.....	.....	.....
Renfrew	.....	40	.....	3.3	4.7	0.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	26.0	.....	.....	.....	3.4	1.9
Russell	1.0	43	.....	10.9	.....	.....	.....	6.0	.....	.....	.....	.....	.....	.....	.....	.....	3.6	.....	.....	26.0	.....
Simcoe	18.3	99	.....	22.7	13.3	6.5	2.5	.....	.....	.....	.....	.....	.....	.....	.....	12.0	.....	8.0	.....	.....	0.2
Stormont	.....	10	.....	7.5	1.9	.....	1.0	.....	.....	.....	.....	2.6	.....	.....	10.7	13.2	.....	8.0	.....	3.5	1.0
Waterloo	.....	9	3	4.8	12.6	1.7	.....	.....	.....	.....	.....	.....	.....	.....	0.5	6.0	.....	1.0	.....	.....	.....
Welland	.....	68	.....	4.5	.....	3.5	.....	.....	.....	.....	.....	.....	.....	.....	11.6	.....	7.3	14.6	.....	.....	.....
Wellington	.....	20	.....	13.5	38.6	.....	.....	.....	.....	3.6	.....	.....	4,750	.....	0.5	27.5	.....	.....	.....	.....	.....
Wentworth	9.0	98	3	24.8	12.5	24.7	.....	0.3	4.8	.....	.....	3.8	6,970	.....	9.5	4.0	.....	8.0	.....	6.8	9.83
York	0.5	3	1	4.2	1.4	.....	.....	2.0	.....	.....	400	.....	.....	.....	27.3	5.0	.....	2.1	.....	0.5	2.1

NOTE—*Denotes county boundaries.

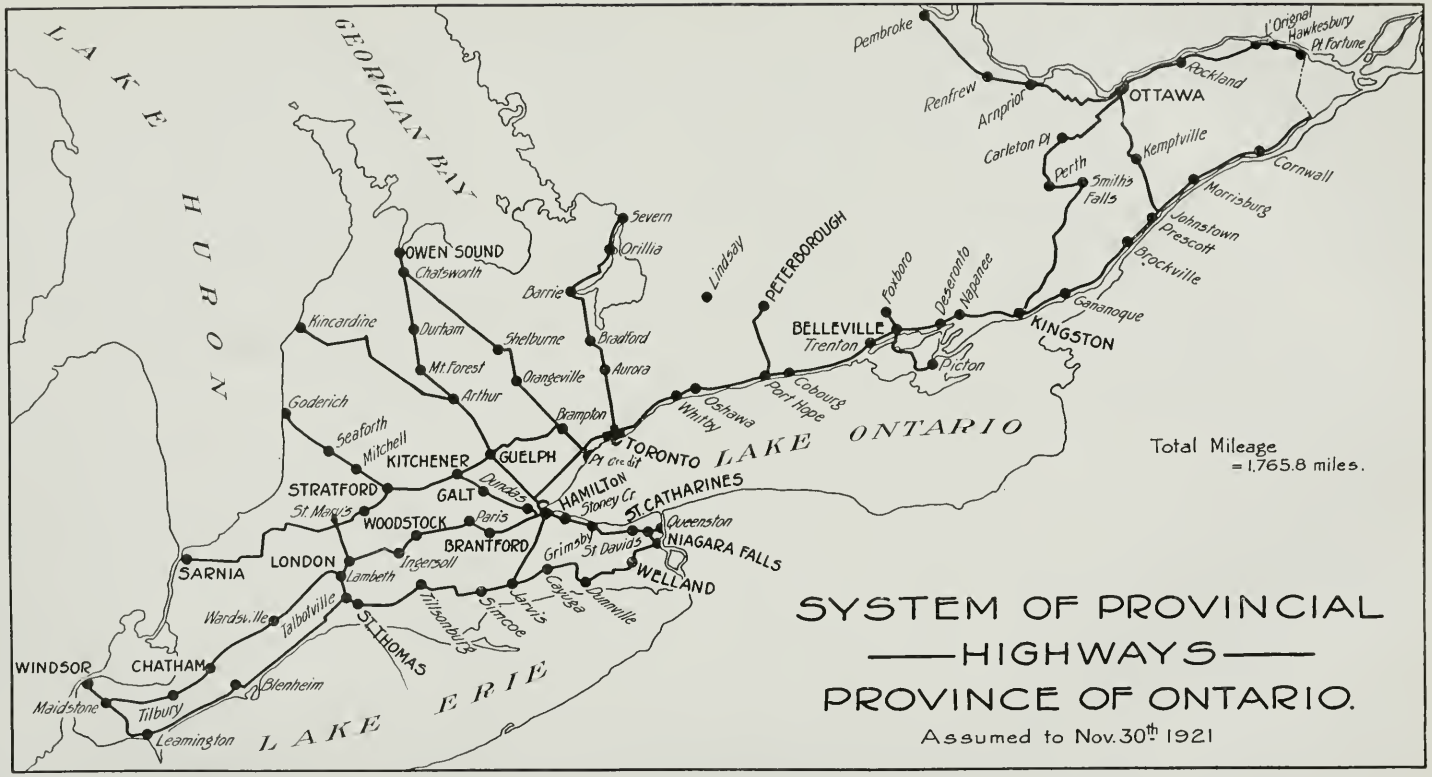
BRIDGES COMPLETED ON PROVINCIAL HIGHWAYS DURING 1921

Name of Bridge.	Span.	County.	Name of Road.
Jones Creek	38′ 6″	Leeds	Gananoque-Brockville
Michael Henry	45′ 0″ skew	Leeds	Gananoque-Brockville
Riversdale	151′ 4″ 2 spans	Bruce	Arthur-Kincardine
Whirl Creek	70′ 0″	Perth	Stratford-Goderich
Baxter Creek	42′ 0″	Northumberland and Durham	Port Hope-Peterboro
Styx River	48′ 0″	Grey	Guelph-Owen Sound
Fish Creek	52′ 0″	Perth	Stratford-Sarnia
Black Creek	60′ 0″	Perth	Stratford-Goderich
Branch of the Teeswater	32′ 0″	Bruce	Arthur-Kincardine
Mimico Creek Bridge (Conc.)	40′ 0″ clear	York	Toronto-Clappison's
16-Mile Creek	932′ 0″	Halton	Toronto-Clappison's (Dundas St.)

Respectfully submitted,

GEO. HOGARTH,

Engineer of Highways.


LAKE HURON
GEORGIAN BAY
LAKE ERIE
LAKE ONTARIO
Pembroke
Renfrew
Arnprior
OTTAWA
L'Original
Hawkesbury
Pt Fortune
Rockland
Carleton Pl
Perth
Smiths Falls
Kemptville
Cornwall
Morrisburg
Johnstown
Prescott
Brockville
Gananoque
KINGSTON
Napanee
Deseronto
Picton
BELLEVILLE
Trenton
Foxboro
PETERBOROUGH
Lindsay
Severn
Orillia
Barrie
Bradford
Aurora
Orangeville
Shelburne
Durham
Mt Forest
Arthur
Kincardine
OWEN SOUND
Chatsworth
Goderich
Seaforth
Mitchell
KITCHENER
GUELPH
Brampton
Pt Credit
TORONTO
Whitby
Oshawa
Cobourg
Port Hope
STRATFORD
GALT
Dundas
HAMILTON
Stoney Cr.
St CATHARINES
Queenston
NIAGARA FALLS
St Marys
WOODSTOCK
Paris
BRANTFORD
Grimsby
St Davids
WELLAND
SARNIA
LONDON
Ingersoll
Lambeth
Caledonia
Dunnville
Wardsville
Talbotville
Jarvis
Simcoe
Tillsonburg
ST THOMAS
WINDSOR
CHATHAM
Blenheim
Maidstone
Tilbury
Leamington
Total Mileage
= 1,765.8 miles.
SYSTEM OF PROVINCIAL
HIGHWAYS
PROVINCE OF ONTARIO.
Assumed to Nov. 30th 1921

MAP NO. 2

REPORT OF DIVISION ENGINEERS, PROVINCIAL HIGHWAYS

EASTERN DIVISION

MR. W. A. MCLEAN, M.E.I.C.,
Deputy Minister of Highways.

SIR:—

I beg herewith to transmit a report of the work done on the Provincial Highways in the Eastern Division for the year 1921.

I have the honour to be,

Sir,

Your obedient servant.

(Sgd.) A. A. SMITH.

OTTAWA-PORT FORTUNE HIGHWAY

From Ottawa easterly 3¾ miles, a 20 foot asphaltic concrete surface on a two-course water-bound macadam base was laid with standard ditches and entrance culverts and, with the exception of ¼ mile at Green's Creek, the remaining 3½ miles into Orleans was ditched and entrances installed. Thirty-four concrete culverts were built, and approximately 12 miles of fences were moved back, completing 95 per cent. of the widening of this section.

From Orleans to Rockland, 9 miles, the bituminous penetration was completed, with the exception of about ¼ mile at Cardinal Creek, approximately 3 miles being laid this year. From a point about 1 mile west of Rockland westerly, 6 miles, the grading, ditching and farm entrances were completed and 15 concrete culverts constructed.

The fences on both sides of the road here, and for 1 mile just east of the Cumberland Township line, were moved back to the 86 foot line.

On the provincial highway within the town of Rockland, two concrete culverts were constructed and about 1.5 of a mile of road surfaced with bituminous penetration, and ditched.

East of Rockland, in Clarence Township, 8 miles, 25 concrete culverts were constructed and about eleven miles of fence moved back to the 86 foot line. Also the bituminous penetration surface was continued from a point about 1¼ miles east of Rockland easterly 3 miles, graded to standard cross-section and farm entrances installed.

From the Clarence-North Plantagenet town line easterly to the east limits of Hawkesbury, 32 miles, the construction consisted of the building of 64 concrete culverts and one bridge at Wind Creek.

From Hawkesbury easterly, approximately 6 miles, fences on both sides of the road were moved back, and with the exception of 6.10 of a mile east from Little Rideau River bridge, grading and ditching was completed and farm entrances installed.

From Bradford's Creek bridge westerly 1¼ miles the highway was fenced on both sides.

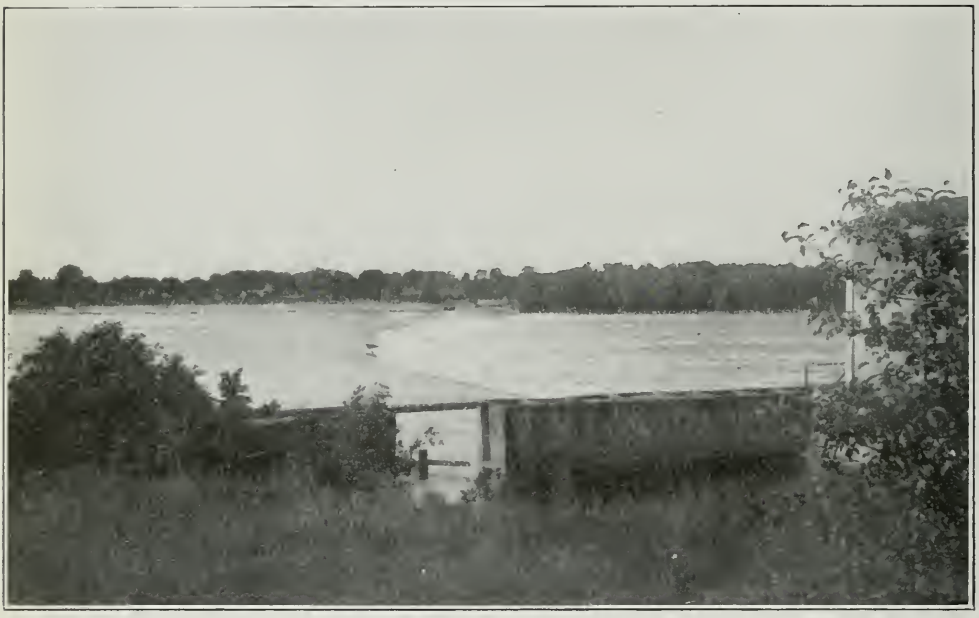
From the town of Hawkesbury easterly to the Quebec boundary, 46 concrete culverts were built.

General maintenance was carried on during the season over the whole highway from Ottawa to Pt. Fortune.

OTTAWA-PEMBROKE HIGHWAY

From Ottawa city limits to the C.P.R. crossing at Britannia, approximately 4½ miles, the right-of-way was cleared and graded to standard cross-section, side entrance culverts installed and 12 concrete culverts built. A rubble foundation 6 inches deep and 20 feet wide was laid for a distance of 2½ miles from Ottawa westerly, and ½ mile of macadam roadway, 10 inches deep and 20 feet wide, constructed from the Richmond road westerly. Five miles of fence was taken down and 3 miles erected on the new limits of the right-of-way.

From the C.P.R. crossing at Britannia north-westerly 27¾ miles to Antrim, very little construction was carried out. Four-tenths of a mile at Carp and 1 mile from Marathon easterly along the Huntley-Fitzroy town line and south in Huntley Township was graded to standard and side entrances installed. The



Ottawa-Pembroke Provincial Highway
View of Carillon Rapids on Ottawa River from Provincial Highway.

above grading was given a coat of gravel, 6 inches deep and 14 feet wide, and between Carp and Antrim 19 concrete culverts were built.

From Antrim to Arnprior, approximately 7 miles, the road was graded and ditched to standard cross-section, side entrance culverts installed, 11 concrete culverts built and the whole stretch given a 14 foot surface of gravel 6 inches deep. The old fence for a length of 2.8 miles was moved back to the new alignment.

West of Arnprior, for a distance of 1/3 mile, the road was graded, farm entrances installed and a 5 inch water-bound macadam base, 20 feet wide, laid. The highway was graded through the cross road, Concession VII, McNab Township, for a distance of one mile and covered with a 6 inch coat of gravel 14 feet wide. Forty concrete culverts were built in McNab Township, and 5-1/3 miles of fencing erected.

From the McNab-Horton town line to Cobden, no construction was carried out except in the marsh south of Cobden, where a fill 30 feet wide for a distance of 4,000 feet was made and gravelled. From Cobden westerly 3¼ miles, the road was given a 4 inch coat of gravel 9 feet wide.

General patrol maintenance was carried on over the whole road.

OTTAWA-PRESCOTT HIGHWAY

The macadam surface was completed from Prescott to the G.T.R. crossing north of Johnstown by the construction of a base course, 8 inches deep and 20 feet wide, from the railway crossing southerly 1.4 miles. One-half mile from Prescott to Wexford was treated with tar. The guard rail at the G.T.R. level crossing, north of Johnstown, was moved back, the crossing improved and

Ottawa-Prescott Provincial Highway
Asphaltic concrete surface passing Dominion Experimental Farm, south of Ottawa.

the bridge at Johnstown completed. General maintenance was carried out over this area and over the gravel section north to Spencerville.

From Spencerville northerly to Bedell, 14 miles, the 20 foot gravel surface was renewed, and 12 culverts built.

Over the entire area from Prescott to the Rideau, scattered fencing and grading was done, and 51 miles of trees were planted.

In Edwardsburg Township, the widening was practically completed and in Oxford Township about 90 per cent. completed. As soon as the culverts were constructed, these points were graded, thereby completing the grading of the entire section except the approaches to the C.P.R. overhead crossing near Kemptville.

From the Rideau River northerly to the North Gower Township line, 1.8 miles, a gravel surface 20 feet wide was laid, and 1/5 mile graded. From the

town line northerly to North Gower Village, approximately 6 miles, the macadam base course was completed by the construction of 4.9 miles, 6 inches deep, 20 feet wide. Stephen's Creek bridge, started in 1920, was completed, and the road surface through the village of North Gower was oiled. The grading and widening from the Rideau River to North Gower Village was practically completed.

From North Gower Village to Hog's Back the grading was completed, about ½ mile being done at Phalin's Hill and Stephen's Creek bridge in North Gower Township and 1/5 mile at Black Rapids in Nepean Township. Three bridges at Watterson's Corners, Carsonby and North Gower, and two culverts, and two bridges at Jock River and Manotick, which were started in 1920, were completed.

One mile of cobble base was laid at Phalin's Hill and over this and northerly for a total distance of approximately 4 miles, gravelling 20 feet wide was done, joining up with the 20 foot gravel surface running south from Manotick. Through the village of Manotick the surface was oiled. Between the Jock River and Johnson's Hill, gravel was placed to give a 20 foot gravel surface from Manotick southerly to Merivale side road. From this point northerly to the junction of the Ottawa-Kingston road at Hog's Back, 5¾ miles, the macadam base course 6 inches deep and 20 feet wide was completed by the construction of 2.8 miles miles northerly from the Merivale side road. The fencing from North Gower Village to Hog's Back was about 90 per cent. completed. The grading was completed, 14 miles of trees planted and 7,513 feet of guard rail erected.

From Hog's Back to Ottawa, four culverts were built, completing the concrete work in this section.

From Johnston to Hog's Back the concrete work, grading and a macadam or gravel surface has been completed and the fencing over 90 per cent. complete. From Hog's Back to Ottawa construction was held up pending settlement with land owners.

The whole of the Ottawa-Prescott highway received continuous general maintenance by patrols.

JOHNSTOWN-QUEBEC BOUNDARY HIGHWAY

From the junction of the Ottawa-Prescott highway at Johnstown easterly 5.3 miles, to the beginning of the Dominion Government Canal road, a macadam base, 5 inches deep and 20 feet wide, was laid, except ½ mile at Woodland's Quarry. The first 3½ miles were oiled and the grading of the whole area completed by the construction of 1½ miles of standard ditches at the east end of this section. From this point into Cardinal Village, 4/5 of a mile, no work was done, this being Dominion Government Canal road.

In the east limits of the Village of Cardinal, 1/3 of a mile of heavy grading was done; and 1-1/5 miles of macadam, 7 inches deep and 20 feet wide, was laid east of the village, completing the macadam surface from Cardinal to Iroquois, except those sections which are Dominion Government Canal road.

From the east limits of Iroquois easterly 3¼ miles to the proposed diversion at Flagg's Creek, a 5 inch water-bound macadam base, 14 feet wide, was laid and 2 concrete culverts constructed. The grading of the whole section from Iroquois to Morrisburg, except 1/5 mile at the proposed Flagg's Creek diversion and one mile of Dominion Government Canal road in the east limits of Matilda Township, was completed, approximately 2½ miles being done during the 1921 season. The new macadam east of Iroquois, 3¼ miles, and about 1¾ miles of the macadam built in 1920, west of Iroquois, was treated with tar.

From Morrisburg Village easterly to the Williamsburg-Osnabruck town line, about 7 miles, 2 miles of heavy grading and ditching, with standard entrance

culverts, was carried out. This work was in scattered sections and included grade reductions and backfilling over culverts; seven concrete culverts having been completed in this area during the season.

From the town line easterly to Farran's Point, 3½ miles, approximately 1.8 miles of grading and ditching with standard farm entrances was done, and directly east of Farran's Point the same work was carried out for about 1½ miles. Through Aultsville and Farran's Point, 2½ miles of surface was treated with 50 per cent. asphaltic road oil and between Farran's Point and Dickenson's Landing, one concrete culvert was built.

East of Dickenson's Landing to the town line, the road was graded and ditched for a distance of 1.6 miles. This was given a 5 inch coat of gravel 20 feet wide to complete the gravel surface from Dickenson's Landing to Moulinette. Nine concrete culverts were constructed in this area.

Through the villages of Moulinette and Mille Roche the surface was treated with 50 per cent. asphaltic road oil.

From Maple Grove easterly 4/10 of a mile of ditching and 7/10 of a mile of macadam construction completed the grading, and a 2 course macadam roadway, 12 inches deep and 20 feet wide, to the west limits of Cornwall Town—approximately 3¼ miles was constructed. This surface was twice treated with tar during the season.

In the east end of Cornwall, ¼ of a mile of road was covered with a 10 foot strip of gravel 5 inches deep, and east of the town the highway was ditched for approximately 1 mile, completing the grading of the 2¼ mile macadam surface to the Cornwall-Charlottenburg town line. This macadam surface was treated with 50 per cent. asphaltic road oil.

Through Charlottenburg Township, 12¼ miles, scattered grading, surfacing, and culvert construction as follows was carried out.

From Lancaster Village easterly, 9 miles, to the Quebec boundary, the highway was graded to standard cross-section and side entrances installed. The 16 foot macadam base, which in 1920 was completed as far as the Bainsville side road, was this year extended easterly 2 miles, and from this point to the Provincial boundary, a 12 foot strip was laid. Five concrete culverts were constructed and 30 off-take ditches dug from the highway to Lake St. Francis. Three-quarters of a mile of road between Lancaster and South Lancaster was treated with tar.

General:

Continuous maintenance was carried on over the whole highway from Johnstown to the Quebec boundary wherever construction operations permitted.

Other construction as follows was done during the season:

Edwardsburg Twp.
Fencing—5.5 miles.
Tree planting—835 trees.

Matilda Twp.
Fencing—0.7 miles.
Tree planting—235 trees.

Williamsburg Twp.
Fencing—40 rods.
Field stone piled—6,861 c.y.

Osnabruck Twp.
Fencing—3 miles.
Tree planting—298 trees.
Field stone piled—12,475 c.y.

Cornwall Twp.
Fencing—1.5 miles.
Tree planting—73 trees.
Field stone piled—9,195 c.y.

Charlottenburg Twp.
Fencing—8.0 miles.
Tree planting—183 trees.
Field stone piled—8,000 c.y.

Lancaster Twp.
Fencing—7.35 miles.
Tree planting—340 trees.

KINGSTON-PRESCOTT HIGHWAY

From Barriefield easterly to the Fingerboard, approximately 9½ miles, a two-course water-bound macadam roadway, 8 inches deep and 20 feet wide, was constructed with standard ditches and farm entrances, and the first three miles east of Barriefield treated with tar. Five miles of the old fences were moved back to the 86 foot line, four miles of trees were planted, and 9 culverts were built.

From the Fingerboard to Gananoque, general patrol maintenance was carried out. Commencing at a point approximately 1 mile west of Pittsburg-Leeds Township line westerly ¾ of a mile, and from the township line easterly for a distance of 2 miles, a macadam base, 8 inches deep and 20 feet wide, was constructed. On the 2 miles east of the township the ditching was completed and trees planted and on the whole section from Barriefield to Gananoque about 16 miles of poles were moved.

Easterly from Gananoque through Leeds, Lansdowne and Escott townships to the Yonge Township boundary, approximately 18 miles, general maintenance was carried on. In Lansdowne Township, 4½ miles of poles were moved and ½ mile of trees planted. In Escott Township one culvert was constructed, one mile of fence moved back, 4½ miles of trees planted and 4½ miles of poles moved.

In Yonge Township, besides general macadam maintenance, 18 culverts were constructed, and two bridges, at Jones Creek and Michael Henry Creek, were completed. From Yonge's Mills easterly 2½ miles heavy grading was completed, farm entrances installed, trees planted, and ½ mile of macadam base, 4 inches deep and 10 feet wide, was constructed. Throughout the whole township, 6 miles of poles were moved off the highway entirely and 1 mile of new fence constructed.

From Yonge Township east boundary, easterly 1 mile, a macadam base course, 4 inches deep and 20 feet wide, was laid, and from Brockville easterly 4 miles, a bituminous penetration surface on a 5 inch water-bound macadam base was constructed. From Yonge township line to Brockville, the grading, ditching, farm entrances, fencing, tree-planting and pole-moving were completed.

From Brockville easterly, approximately 2½ miles of macadam base, 6 inches deep and 20 feet wide, was laid, grading completed, farm entrances installed, and trees planted. The highway was widened to 86 feet from Brockville to Maitland, a distance of 3.7 miles. From this point easterly to Prescott, approximately 7 miles, 22 concrete culverts were built, 1½ miles of old fence moved to the new line, 3 miles of grading and ditching done, and 1/3 mile of macadam base 20 feet wide in the village of Maitland were constructed.

General maintenance was carried out over the whole road.

BELLEVILLE-KINGSTON HIGHWAY

From Belleville to Shannonville, a distance of 7 miles, a two-course, water-bound macadam roadway 20 feet wide was completed with standard ditches and farm entrances. Six concrete culverts were constructed in Thurlow Township, and about 4½ miles were treated with tar. Five and three-quarter miles of the highway were widened to 86 feet.

The rock cut and bridge at Shannonville, which were started in 1920, were completed and the diversion opened to traffic.

From Shannonville to Marysville bridge the road was ditched and graded and standard entrance culverts installed. This newly graded section was immediately given a heavy coat of gravel 10 feet wide over the entire length, including the Shannonville diversion.

Marysville bridge, which was started in 1920, was completed and opened to traffic.

General patrol maintenance was carried out over the entire stretch of gravel road from Shannonville to the Slash road about 1¼ miles south of Marysville, a distance of 7¾ miles.

From the Slash road southerly 1.7 miles an 8 inch macadam base 20 feet wide was laid over the heavy grading done the previous year. From this point into Deseronto, 3.3 miles, maintenance was carried out and three concrete culverts were constructed, thereby completing the culverts on this section.

From Deseronto to Napanee, 3½ miles of macadam base 20 feet wide were constructed, linking up with the macadam previously laid from Napanee westerly and completing a macadam surface from Deseronto to Napanee, a distance of 5¼ miles. The stone for this work had been quarried from Napanee Hill and piled by the road during the previous winter. The construction of ½ mile of ditching completed the ditching of this section. The finished road from Napanee westerly 1.7 miles was treated with tar and general maintenance was carried on over the whole section.

Napanee Hill cut was completed, and a two-course water-bound macadam roadway laid through it.

From the east end of the cut easterly 5 miles to Lund's Quarry, the macadam surface was patched and treated with tar and general maintenance was carried on. Kayler's bridge was completed and opened to traffic.

The rock fill over the large culvert just east of the quarry was brought up to grade and a macadam surface laid over it. The 1.7 miles of macadam west of Odessa was treated with tar, two miles of the highway widened to 86 feet, and 1¾ miles of trees planted.

From Nigger Hill (Kingston Township boundary) easterly 7¾ miles to Kingston, the macadam surface was treated with tar and general maintenance carried on by a patrol. A short length of ditching and tiling was done just west

of Kingston and 1¾ miles of highway widened to 86 feet, mainly between Kingston and Cataraqui.

Over the entire road continuous maintenance was carried out.

OSHAWA-BELLEVILLE HIGHWAY

From Oshawa to Port Hope, approximately 28½ miles, gravelling 20 feet wide was carried out with the exception of about 1 mile in the town of Bowmanville, on which asphaltic concrete was laid. Of this 0.7 mile was laid by the town of Bowmanville, and the remainder by the Department. Thirteen concrete culverts were constructed, approximately 6½ miles of scattered ditching completed, farm entrances installed and fourteen and a half miles widened to 86 feet. Some 2,000 feet of guard rail was erected at Roseberry and Rowes hills and about 20 miles of trees planted throughout the section. From Oshawa to Harmony the gravel road was treated with asphaltic oil road.

From Port Hope to Belleville is approximately 50½ miles. Of this 4-1/3 miles within the larger towns is not Provincial Highway. On the highway,

Port Hope-Belleville Provincial Highway
Gravel surface east of Colborne.

scattered gravelling was done where necessary, 25½ miles being covered with a 4 inch coat, 20 feet wide. At various points throughout this area a total of 23½ miles of road was widened to 86 feet, 10 miles of grading and ditching with farm entrances done, 2 miles of poles moved, 15 miles of trees planted, 11 culverts built and 3,115 feet of storm sewers laid.

Patrol maintenance was carried on over the whole road from Oshawa to Belleville.

BELLEVILLE-PICTON HIGHWAY

From Belleville southerly, approximately 6 miles, the surface was given a light coat of gravel.

From Mountain View to Pearsall's bridge the surface was maintained with broken stone. Three miles from Pearsall's bridge southerly, the macadam built the previous year by the County was given surface treatment with tar.

From Bloomfield to Picton the surface was maintained with gravel.

Considerable repairs were made to the floor of Belleville Bay bridge and over the whole road continuous patrol maintenance was carried on.

BELLEVILLE-FOXBORO HIGHWAY

From Belleville northerly for 3 miles the road was ditched and graded to standard cross-section and the necessary farm entrances installed. Two miles of this fresh grading was covered with a macadam base course, 20 feet wide, and, from Foxboro Village southerly one mile the old macadam surface was treated with tar. Over the whole length of the road, 15 concrete culverts were constructed during the season.

PORT HOPE-PETERBORO HIGHWAY

The road was graded and ditched, standard entrances installed and a 6 inch gravel surface, 20 feet wide, placed on the following sections:

(a) Port Hope northerly—1.3 miles.
(b) Hope-Hamilton town line—1¼ miles.
(c) South of Baileyboro—1/3 mile.
(d) Between Centreville and Fraserville—approximately 2 miles.

Toronto-Port Hope Provincial Highway
Gravel surface between Cobourg and Port Hope.

(e) North and south of Kendry railway crossing—2 miles.
(f) From Scott's Corners north-easterly—2/5 miles.

From Peterboro south-westerly, 4.3 miles, a 6 inch water-bound macadam base 20 feet wide was laid with standard ditches and side entrances complete.

Over the whole road 54 concrete culverts were built and 1-1/5 miles of fence moved back to the 86 foot line.

General maintenance, consisting of patching, dragging, weed-cutting, cleaning ditches and culverts and removing snow, was carried on continuously over the whole road by a patrol gang.

OTTAWA-KINGSTON HIGHWAY

From a point about 3 miles east of Ashton, easterly for 1 mile, the road was graded, standard entrances installed, and a cobble base 18 feet wide with a gravel surface laid. Eleven concrete culverts were built in Goulburn Township, and the whole road from Ottawa to Ashton was cleared of weeds and brush, and the surface kept in repair by patching and dragging.

From Ashton to Ashton Station, 1.5 miles, the road was graded, standard entrances installed, a macadam surface laid, 5 concrete culverts built, and the right-of-way widened to 86 feet.

From Ashton Station to Perth the right-of-way was cleared of weeds and brush, and the surface maintained by patching and dragging. At Boyd's Corners, a diversion, 1700 feet long, to improve the alignment, was graded and 4 concrete culverts built.

From Perth to Smith's Falls is 11¼ miles. From Perth south-easterly, 2¾ miles of road was cleared and widened to 86 feet, and, south-east of Port Elmsley, three-quarters of a mile of penetration surface was completed. Maintenance of this section required heavy patching with tar.

From Smith's Falls to Morton, 30¾ miles, heavy maintenance was carried on, a temporary 18-inch tile culvert was placed across the road in the swamp just west of Portland, and ½ mile of road ditched at this point. Scattered sections in this area were given a 3 inch coat of gravel 10 feet wide as follows:

(a) Lombardy north-easterly 2¼ miles.
(b) Between Lombardy and the Kitley—S. Elmsley town line—½ mile.
(c) At New Boyne—½ mile.
(d) North-east of Portland—1 mile.
(e) Through the swamp south-west of Portland—2 miles.
(f) Seven and a half miles north-east of Elgin—½ mile.
(g) Elgin—1/3 mile.

From Morton to Joyceville, 24½ miles, 48 concrete culverts were constructed and heavy maintenance carried on. Three scattered sections as follows were given a gravel surface 10 feet wide and 3 inches deep.

(a) West of the Lyndhurst road—½ mile.
(b) From 2½ miles west of Seeley's Bay westerly—1 mile.
(c) From 5 miles west of Seeley's Bay westerly—½ mile.

From Joyceville westerly 6 miles no construction work was undertaken, but continuous maintenance was carried on. From this point to Barriefield, 26 concrete culverts were constructed and the road patched with broken stone.

TORONTO-OSHAWA HIGHWAY

From Toronto to West Hill, approximately 8½ miles, general macadam maintenance was carried out, the section from the G.T.R. crossing to West Hill being twice treated with tar during the season.

From West Hill easterly 1.4 miles of road were gravelled and from the eastern end of the proposed Highland Creek diversion easterly, approximately 1½ miles, to the Pickering Township line was graded, five concrete culverts constructed and about ½ mile of the highway widened to 86 feet.

From the township boundary to Dunbarton, about 3 miles, the macadam base 6 inches deep and 22 feet wide was completed, and two concrete culverts constructed in the vicinity of the Rouge. From the end of this macadam easterly 3½ miles of asphaltic concrete surface 22 feet wide on a 9 inch water-bound macadam base were constructed, linking up with the asphaltic concrete laid in 1920 from Dunbarton to Pickering Village.

From Pickering Village to Whitby Township boundary, approximately 3½ miles, the 6 inch macadam base, 22 feet wide, was completed and this whole

section treated with tar. Trees were planted along the road within Pickering Township; five miles of the highway were widened to 86 feet and about 1,200 feet of guard rail erected.

From the west limits of West Whitby to Oshawa, except about a mile in Whitby Town, a 6 inch water-bound macadam base, 22 feet wide, with standard ditches and farm entrances, was completed. On the mile in Whitby Town, mentioned above, 0.6 mile was constructed by the Town, and the remainder by the Department.

WESTERN DIVISION.

MR. W. A. MCLEAN, M.E.I.C.,
Deputy Minister of Highways.

SIR:—

I beg herewith to transmit a report of the work done on the Provincial Highways in the Western Division for the year 1921.

I have the honour to be,
Sir,
Your obedient servant,
(Sgd.) G. F. HANNING.

HAMILTON-LONDON PROVINCIAL HIGHWAY
Steam shovel excavating for subway under Toronto-Hamilton and Brantford Railway.

HAMILTON-LONDON HIGHWAY

Between Hamilton and Brantford fencing, grading and concrete culverts were completed with the exception of about six miles of fencing in Ancaster Township and 3/10 miles of grading at Binkley's subway. A macadam base

22 feet wide was constructed easterly from the Ancaster quarry 1.2 miles, to connect with the bituminous pavement constructed the previous year, and a second base course 5 inches thick and about 1.9 miles in length was laid in Ancaster village. The existing macadam base, 10 feet wide and 5 miles in length, west of Ancaster was widened to 22 feet and a new macadam base 22 feet wide was constructed westerly from the end of this macadam to the Brant-Wentworth county line.

For a distance of five miles from the Brant-Wentworth county line to Cainsville a 20 foot concrete pavement was constructed. This pavement connects with a stretch of about one-quarter of a mile of similar pavement which was laid the previous year.

From Cainsville to the easterly limits of the city of Brantford a 30 foot concrete pavement with curb and gutter and storm sewers which was commenced in 1920 was completed. The tracks of the Brantford Municipal Railway between the easterly limits of Brantford and the Mohawk Park entrance were moved to the south side of the road to provide clearance for the 30 foot pavement.

HAMILTON-LONDON PROVINCIAL HIGHWAY
Gravel surface and standard concrete culverts near Paris.

About three miles west of Brantford grading and fencing was done by day labour during the winter months over about 1/5 of a mile. The existing gravel road was maintained by dragging and patching. Culverts were cleaned out and oil applied to about four miles of road.

Between Paris and Woodstock 6.9 miles of road was graded and brought to standard cross-section, which completed the grading on this section. Twenty-six culverts were built and the right-of-way was widened to 86 feet for 3.7 miles westerly from Paris and for short distances at three other points between Paris and Woodstock, totalling in all about 6.5 miles of widening. A coat of gravel was applied from Paris westerly for a distance of 11 miles. Two and one-quarter miles of macadam was laid through swampy ground in the vicinity of Eastwood, linking up with the old macadam road which extends easterly from Woodstock a distance of 3 miles. This old macadam road was scarified and rolled. Trees were prepared for planting in Burford and Blenheim Townships.

Between Woodstock and Ingersoll 1/10 of a mile of heavy grading was done and 10 concrete culverts constructed. Three and a half miles of road was lightly gravelled.

Between Ingersoll and London 18 concrete culverts were constructed. The road was graded and brought to standard cross-section from Ingersoll and Thamesford, a distance of 4.8 miles. This includes 1/10 of a mile of heavy grading at Thamesford. From Ingersoll westerly for a distance of 2½ miles, the right-of-way was widened to 86 feet. The Thamesford bridge was completed and opened to traffic.

Four-tenths of a mile of gravel asphalt was laid in Thamesford village and a second coat of gravel was applied over the remainder of the road between Ingersoll and London, approximately 15.4 miles. Four hundred lineal feet of guard rail was erected.

Patrol maintenance was carried on over the entire road, including dragging and patching and cleaning of ditches and culverts. The injurious effects of springs in the roadway were overcome by undertiling. Some 250 yards of road was undertiled for this reason.

London-St. Thomas Provincial Highway
Concrete pavement constructed during 1921.

LONDON-ST. THOMAS HIGHWAY

From the City of London southerly to the southerly limits of Lambeth Village, a distance of 5½ miles, grading and culverts were completed and a concrete pavement 20 feet wide constructed. Two thousand two hundred lineal feet of storm sewer was laid by day labour and 14 catch basins constructed. From Lambeth to St. Thomas, a distance of 9½ miles, the road was gravelled. One hundred and thirty-two lineal feet of guard rail was erected.

Weeds were cut and the road kept in repair by dragging and patching. One mile of road in Lambeth village was treated with oil.

LAMBETH-MAIDSTONE HIGHWAY

The road was graded and brought to standard cross-section and a concrete pavement constructed for a distance of 1,011 lineal feet westerly from Lambeth.

From the end of this concrete to Wardsville, a distance of approximately 31 miles, is a gravel road. Scattered construction work was done on this section during the 1921 season. About ¾ of a mile was graded and brought to standard cross-section just east of Delaware village and the approaches to Delaware

bridge and those to the bridge 1½ miles west of Melbourne were widened. From the end of the concrete at Lambeth to the easterly limits of Christina village, a distance of 11 miles, the road was resurfaced with gravel; from the westerly limits of Christina village westerly 1½ miles, and from 2 miles west of Melbourne westerly to Wardsville, 13 miles. Weeds were cut and guard rail repaired. About 1½ miles of road in Melbourne village was treated with oil. The road was dragged and patched where necessary over the whole of this section.

From Wardsville to the city of Chatham, a distance of approximately 29 miles, was for the most part a sand and clay road, with gravel in Wardsville village and westerly 5½ miles; easterly from Thamesville 1.4 miles, and easterly from the east limit of Camden Township 1½ miles. Some nine stretches of road varying in length from ½ mile to 2.3 miles were graded to standard cross-section. This includes 0.7 miles of grading for concrete pavement east of Chatham. Nineteen culverts were constructed and about 0.4 miles of fence moved back to the 86-foot line on the north side of the road in Zone Township. The road was newly gravelled through Wardsville village and westerly for a total distance of 6.7 miles, from Thamesville easterly 1.7 miles, from Thamesville westerly 1.4 miles, and from the westerly limits of Camden Township, easterly 1.5 miles. Construction of the concrete pavement, extending easterly from Chatham 2 miles, was started at the easterly end and completed for a distance of 3,600 lineal feet towards Chatham. Patrol maintenance was carried on over the whole of this section. The road was dragged and patched where necessary. Weeds were cut, and culverts and bridges repaired.

From the city of Chatham to Maidstone, a distance of approximately 40 miles, was practically all clay road with the exception of about 3 miles of gravel in Maidstone township. The road was graded to standard cross-section in Tilbury town and westerly, a distance of ¾ miles, and for a length of about ½ of a mile, 2 miles east of Tilbury. The fences on the north side of the road were moved back to the 86 foot line over this half mile. Ten concrete culverts were constructed, ¾ mile of concrete pavement was laid in Tilbury town and westerly. The road was gravelled from Tilbury town easterly 1 mile, from Big Creek to the town line of Tilbury north and Tilbury west, a distance of 2 miles; from the village of Comber westerly to the village of Woodslee, a distance of 9½ miles, and from Maidstone easterly 3 miles.

The department paid a part share of the cost of construction of the Tracey drain in Rochester township.

The road was dragged and patched, weeds were cut and general maintenance carried on over the whole section.

ST. THOMAS-WINDSOR HIGHWAY

The road was gravelled from Talbotville to Shedden, a distance of 6½ miles. The rest of the road in Southwold and Dunwich townships was a fair gravel road. Heavy grading was commenced with a steam shovel in Dunwich township but was not completed. The road in Aldborough township was in very poor condition, being very light sand with ½ mile gravelled. Two steam shovels were used for heavy grading and the entire stretch of 10½ miles was graded to standard cross-section and surfaced with gravel. Forty-one culverts were built. A gravel hoist was erected on the lake shore as no pit gravel was available.

With the exception of gravelling, practically no construction work was undertaken between the westerly limit of Aldborough township, which is the

boundary between Kent and Elgin counties, and the village of Wheatley, a distance of approximately 50 miles, as the surface was gravel and in very good condition. Sections of the road were surfaced with gravel as follows: From Clearville westerly 1.8 miles; 2 miles through Palmyra and westerly; east of Morpeth, 1 mile; Morpeth westerly, 4.8 miles; easterly from Blenheim, 3 miles; westerly from Blenheim, 14½ miles; east and west of Coatsworth side-road, a total distance of 3.4 miles; and easterly from Wheatley about 2 miles.

From Wheatley to Leamington, a distance of 6.7 miles, the road was graded to standard cross-section, a light coat of gravel applied, and seven concrete culverts were built. The road was gravelled from Leamington to Essex, a distance of 14.8 miles, and from Essex westerly 7 miles to the Pere Marquette railway crossing at Oldcastle. The old fence between lot 288 Maidstone township and the Sandwich south town line was taken down and moved back and a portion re-erected on the new right-of-way line.

A concrete pavement was constructed from Oldcastle westerly 2.7 miles. Part of the grading was done on this section. From the end of this concrete pavement to Windsor, a distance of 4 miles, the road was graded to standard cross-section. This includes the new grade across the Neal farm cut off. New fences were erected on the 86 foot line across the Neal farm. Twelve culverts were constructed between Oldcastle and Windsor.

General maintenance was carried on over the entire road. The surface was dragged and patched, weeds were cut and culverts were cleaned and repaired.

NIAGARA FALLS-ST. THOMAS HIGHWAY

The road between Niagara Falls and Welland, a distance of approximately 12½ miles, is an old macadam road. Thirteen concrete culverts were built on the section, the road was graded to standard cross-section for four miles northerly from Welland and surfaced with stone to a width of from 10 to 16 feet, from Welland northerly and easterly 11½ miles. Sixty-one concrete culverts were constructed between Welland and Dunnville.

From Dunnville westerly the road was graded to standard cross-section for a distance of 8.8 miles. Thirty-five culverts were built between Dunnville and Cayuga, and a macadam road was constructed from Dunnville westerly 9 miles, and from Cayuga easterly two miles. This completes the grading, culverts and macadam between Dunnville and Cayuga. From Cayuga to the east limit of Walpole township, a distance of 5.8 miles, is an old macadam road. A clay road extends through Walpole township, a distance of 6.6 miles, with about 1.2 miles of old macadam extending easterly from Jarvis which connects with a concrete pavement in the village of Jarvis. Thirty-six culverts were constructed between Cayuga and Jarvis and the road was graded to standard cross-section from Jarvis easterly four miles.

From Jarvis to Tillsonburg is for the most part a sand and clay road with stretches of gravel in Delhi and Courtland villages and westerly from Courtland 2½ miles. Extending easterly from Tillsonburg is about ½ mile of gravel, ½ mile of tar macadam and ½ mile of macadam base. Four concrete culverts were built in Walpole township just west of the village of Jarvis. The road was graded to standard cross-section from Jarvis westerly 1 mile, from Black Creek easterly 1.2 miles and westerly 3 miles including about 1.3 miles of heavy grading. A gap of 3/10 of a mile was left at Black Creek. About 3 miles of grading was done easterly from Courtland village.

A coat of gravel was applied to the newly graded sections east and west of

Black Creek and east of Courtland and also from Delhi easterly 1 mile and from Simcoe westerly 7 miles. Some 1913 rods of fencing was done.

Between Tillsonburg and St. Thomas two culverts were constructed. One-half of a mile of heavy grading was done at Springer Hill in Bayham township, and grading was commenced in Yarmouth township, but not completed. Gravel was applied to the fresh grade at Springer Hill and easterly from St. Thomas 8 miles. The right-of-way was widened to 86 feet for a distance of 0.3 miles at Springer Hill and 2,412 lineal feet of guard rail was erected.

General patrol maintenance was carried on over the entire road. The road was dragged and patched, and washouts and culverts repaired. Weeds were cut and ditches cleaned. The old macadam road extending 1 mile westerly from Aylmer and also from the Moulton-Wainfleet township line easterly for 8 miles was oiled.

HAMILTON-JARVIS HIGHWAY

This is an old macadam road throughout, approximately 25 miles, excluding those portions in the towns of Caledonia and Hagersville. The road was graded to standard cross-section from Hamilton southerly 3.8 miles, and a macadam base constructed over the same distance. Seventy culverts were constructed, which practically completes the culverts on this section.

The road was patched with stone. Ditches were cleaned, weeds cut and bridges repaired. The road was treated with oil between Mount Hope and North Glanford, a distance of 2 miles.

HAMILTON-QUEENSTON HIGHWAY

Grading and culverts were completed between Hamilton and Grimsby. The road was gravelled from Hamilton city-limits easterly to the junction of

Hamilton-Queenston Provincial Highway
A scenic stretch of road at Jordan.

HAMILTON-QUEENSTON PROVINCIAL HIGHWAY
View from Provincial Highway looking up 20-mile Creek at Jordan.

the Stoney Creek road at mile 5. A waterbound macadam base was constructed from mile 5 to Winona, a distance of 4 miles, and a bituminous macadam surface, which was commenced in 1920, was completed from Winona to Grimsby with the exception of about ½ mile where a macadam base was constructed. The tracks of the Hamilton, Grimsby and Beamsville Electric Railway at mile 5 were moved to a new location to provide a better crossing of the road, and two level crossings were eliminated west of Grimsby by the relocation of one mile of track on the south side of the road. Some 180 rods of fencing was done in Saltfleet Township.

Between Grimsby and Beamsville two concrete culverts were constructed and the road was graded to standard cross-section from Beamsville westerly ¾ mile, completing the grading on this section. A macadam base was constructed easterly from Grimsby to Grimsby Park road, a distance of 1.3 miles and westerly from Beamsville ¾ mile.

A bituminous macadam surface was constructed from Grimsby Park road to Beamsville, a distance of 3 miles with the exception of about 0.4 miles at the "Thirty Mile" Creek.

Between Beamsville and St. Catharines six concrete culverts were constructed The road was graded to standard cross-section at the "Fifteen" and "Sixteen" Mile Creeks where some heavy cutting was made. This completes the grading between Beamsville and St. Catharines with the exception of a short stretch where a diversion is to be constructed at Jordan Corner, in order to improve the turn at this point. One-third of a mile of bituminous surface was constructed easterly from Beamsville, which provides an improved surface from Beamsville to Vineland, a distance of 3½ miles. Between Jordan and St. Catharines a macadam base was completed, about 3.2 miles being constructed this season, and a bituminous surface was constructed over the whole distance, approximately 5.3 miles. This provides an improved surface between Beamsville and St. Catharines with the exception of the short stretch at Jordan. Three thousand four hundred lineal feet of guard rail was erected between Beamsville and St. Cath-

arines at fills requiring same, and 450 rods of fence was moved back. Trees were planted over three miles of right-of-way in Louth Township.

From Homer to St. David's, a length of approximately 4 miles, a macadam base was constructed and seven concrete culverts were built. Sixty-six lineal feet of guard rail were erected and 2 miles of trees were planted.

The entire road was under patrol maintenance, the sections having a macadam surface receiving, in addition to the regular maintenance, two applications of oil.

ST. DAVID'S-NIAGARA FALLS HIGHWAY

Ditches were constructed at St. David's corner and heavy grading was done on the St. David's ravine hill to the Stamford-Niagara line. The grades were reduced and the road widened. Eleven concrete culverts were built. A macadam base was constructed from St. David's to Niagara Falls, a distance of about 4 miles, with the exception of about ½ mile at the St. David's ravine hill where the heavy grading was done, and about ¼ of a mile in Stamford village which was paved with concrete before the road was taken over by the Department.

The road was patched and oiled, small sections of concrete pavement repaired, and ditches and culverts cleaned.

NORTHERN DIVISION.

MR. W. A. MCLEAN, M.E.I.C.,
Deputy Minister of Highways.

SIR:—

I beg herewith to transmit a report of the work done on the Provincial Highways in the Northern Division for the year 1921.

I have the honour to be, Sir,

Your obedient servant,

(Sgd.) R. M. SMITH.

TORONTO-SEVERN HIGHWAY

The Toronto suburban area extends northerly along Yonge street to the Holland river. In York township no construction was done in 1921, the road was maintained, however, by placing stone on the edges of the present pavement where traffic had undermined and broken away the existing surface. Holes in the pavement were patched with stone and tar. The whole was then treated with tar and a cover of 3/8 inch stone. Minor repairs were made to bridges and culverts. Surveys were made in the township, including the proposed site for the high level bridge across the Don Valley.

Through the townships of Markham and Vaughan maintenance of a similar nature was done. Stone was shipped in and piled for patching.

In the townships of King and Whitechurch, from Eagle street, Newmarket, to township boundary, approximately 5/8 of a mile, bituminous macadam

Toronto-Severn Provincial Highway
View of Lake Couchiching from Provincial Highway north of Orillia.

surface was completed. Side entrances were completed by day labour. From South Town Line to Aurora the road was kept in shape by maintenance patrols.

Between the north boundary of King and Whitechurch townships to the top of Holland Landing hill, 1.95 miles, tar penetration pavement was completed under contract, the grading and side entrances being done by day labour. Stone 4 inches deep was applied on the Holland Landing hill.

Between King Township line and the Holland River crushed stone was placed for a base course over a distance of about ½ mile. This work was continued from Holland River to Bradford.

From a point about 1½ miles north of Bradford to the north boundary of West Gwillimbury township, a distance of 5½ miles, macadam base was laid. Grading was done and side entrances installed throughout this section. Eighteen culverts were built. Considerable maintenance was required on the old gravel road adjacent to this new macadam to keep it in shape for the heavy traffic. Through the township of Innisfil 20 culverts were built. The road had been in very rough condition and required a considerable quantity of gravelling to put it in good shape. Ditches were opened up, and several tile entrances installed to prevent washing out of the road.

At Barrie the province has assumed 0.4 miles inside the town limits at the south entrance and 1.6 miles at the north entrance. At the south entrance one culvert was built and at the north 1.9 miles of grading was completed, and this grade received an application of gravel. Three culverts were also built within the north town limits. From Barrie limits to Crown Hill 1.7 miles were graded to standard section and then gravelled. In Oro Township grading was done from concession 10 to the north town line, a distance of 6.3 miles. This included one bad hill where grade was reduced from ten per cent. to seven per cent. Eleven culverts were constructed within this section and gravel applied. Gravel was also applied on the old road in concessions 2 to 6 and some entrance tile installed where grading was completed.

In the township of South Orillia, from south boundary 2.2 miles north, the grade was reduced on numerous small hills and the road gravelled. From Orillia Asylum entrance to the Barrie road, a distance of nearly 1 mile, a diversion was

constructed in order to provide a better approach to the town. The diversion being on low ground, two light coats of gravel were placed on this new grade.

Between Orillia and the north boundary of the township 0.7 miles were graded by day labour. Field stone was crushed and a macadam road built. Eighteen culverts were built in the township of South Orillia. From the south town line, township of North Orillia, to village of Ardtrea, 1.8 miles, were graded to standard section. Field stone was crushed and a macadam road built on this section. From Ardtrea to Washago the stone road was kept dragged and patched where necessary with 1 inch stone and screenings. North of Washago rock grading was done for a distance of 0.2 miles and the old macadam road maintained by gravel application to the Severn River.

BRAMPTON-STRATFORD HIGHWAY

From Brampton to Georgetown, a distance of 8.0 miles, the highway was gravelled and kept in good shape by dragging, making a great improvement in the surface. Some light ditching was also carried out to assist drainage. The road from Georgetown to Acton has not been assumed, due to the fact that several diversions are contemplated for work in 1922, but maintenance was carried out from Acton to the eastern limits of Guelph township. From this point to Guelph city, a distance of 2¾ miles, the road was graded a short distance immediately east of the city limits and loose stone was laid on approximately 1½ miles and the remainder of this section was gravelled.

Westerly from Guelph the road was gravelled in stretches where the surface required such treatment. Continuing westerly to Breslau, the highway was lightly gravelled and reshaped and between Breslau and Kitchener, approximately three miles were resurfaced with gravel. Practically all the necessary culverts were constructed from Guelph to Kitchener, preparatory for the grading operations planned for next season.

From Kitchener westerly maintenance by dragging and patching with gravel was carried out. The section of the road through the villages of Baden and New Hamburg were maintained by applications of asphalt and tar. Light grading and ditching was done in several localities, and from a point about 3½ miles east of Stratford to the city limits the road was gravelled, right-of-way cleared of brush, and roadbed widened on the dangerous sections, making a marked improvement in the approach to the city.

HAMILTON-CHATSWORTH HIGHWAY

The three high-level bridges at the Hamilton entrance were completed and the grading for the approaches to these bridges undertaken. Good progress was made on the large rock cut at Clappison's Corners. A macadam base was constructed from Clappison's Corners north 3 miles and the road was gravelled from the end of this macadam to the village of Puslinch. The culverts on this section were practically completed. In the township of Puslinch the road was maintained by re-surfacing and patching with gravel for a distance of 5 miles. The stretches of road through the villages of Puslinch, Morriston and Aberfoyle were oiled. The road was graded and surfaced with concrete pavement for a distance of 3.6 miles immediately south of the city of Guelph, culverts constructed and standard ditches built. A storm drainage system of approximately 5,000 feet was also installed on the Ontario Agricultural College hill.

Hamilton-Guelph Provincial Highway
Cement concrete surface 20 feet wide, south of Guelph.

Northerly from Guelph, the road was gravelled a distance of 11 miles to the village of Fergus, and the road kept in good condition by dragging. About 1 mile north of Fergus the road was graded and ditched a distance of 2 miles, and again for a distance of 2 miles immediately north of the Peel-Nichol boundary. The section from Arthur south 3 miles was graded and ditched and 2½ miles of this piece was lightly surfaced with crushed stone. Through the township of Arthur the road was surveyed. About 1½ miles in this township was gravelled and the remainder kept in good shape by dragging and patching with gravel. Midway between Mount Forest and Durham, at the long swamp, grading was completed and the right-of-way widened to 86 feet. About 1½ miles of the road was gravelled and the surface kept in good repair by dragging and patching. The approach to the town of Durham was gravelled, and north of the town the road was also gravelled and ditched for a short distance. North of Durham, through the townships of Bentinck and Glenelg, the road was kept in good shape by dragging and patching with gravel. Thirteen culverts were constructed and a steel bridge erected over the river Styx. Through the village of Dornoch the road was ditched and approximately 600 feet of storm drain installed. General maintenance was kept throughout. A dangerous curve south of Chatsworth was eased and the road through the village was patched with gravel and then oiled.

STRATFORD-GODERICH HIGHWAY

From Stratford westerly, 3.82 miles of asphaltic concrete pavement were constructed. From the end of this pavement westerly, a distance of two miles, a macadam base was laid and surface treated with tar. From this point to Mitchell the road was scarified and reshaped. A new steel bridge at Sebringville, 60 ft. span, replaced the old wooden structure at this point, and at Whirl Creek the old steel structure was also replaced by a new 70 foot steel span.

West of Mitchell the road received a light coat of gravel, and this type of maintenance was continued as far as Holmesville. In the town of Seaforth some ditching was carried out, side entrance culverts installed and gravel applied. Some widening was also done by day labour, in short stretches where the highway was narrow and dangerous or where drainage was poor. Heavy grading was done between Holmesville and Taylor's Corners, a distance of 3.69 miles. All the culverts between Stratford and Goderich were completed.

STRATFORD-LONDON HIGHWAY

During the season 1921, the road received a 3 inch coat of gravel from Stratford south-westerly a distance of 9.6 miles. On this section, some 3½ miles was graded and ditched. Westerly from St. Mary's, the road was also gravelled, and grading and ditching was done from the north-east corner of London township to Elginfield, a distance of 6 miles.

Southerly from Elginfield, short stretches of the road were graded and ditched and generally maintained by patching with gravel. The suburban area of London extends northerly from that city a distance of 5¼ miles. On this section of road, ditches were laid out and grades set preparatory to the ditching widening of the roadbed. From the Thames River, northerly to the middle concession IV, side ditches were constructed and the roadbed widened. Two light coats of gravel were applied from the city line to a point near St. Johns. Some work was also done on the abutments for the proposed new bridge over the Thames River at London. Most of the culverts were constructed between London and St. Johns, also between Elginfield and St. Marys, and one bridge of 50 feet span with 24 foot roadway over Fish Creek.

ELGINFIELD-SARNIA HIGHWAY

From Elginfield westerly for about 3.0 miles the road was graded and ditched. From Ailsa Craig westerly to Arkona very little construction was done. About 1½ miles of the highway was gravelled in the township of E. Williams and a further 6.0 miles gravelled in the township of W. Williams. Passing into the county of Lambton at the Aux Sables River, culvert construction was undertaken and all structures completed to the village of Arkona, preparatory to 1922 grading.

Through the township of Warwick, a distance of approximately 14 miles, the road received a light gravel application. About 2½ miles in Plympton township was graded and ditched and 11 miles gravelled.

From the east boundary of Sarnia township, the highway received a light coat of gravel. Westerly for 2½ miles from the Sarnia city limits, a concrete pavement was constructed. The pavement is 18 feet wide with 6 foot gravel shoulders on each side. Side ditches were opened and culverts constructed. The work done on this section of road has greatly improved the approach to the city. On the above section practically all culverts were completed between Elginfield and Arkona.

TORONTO-HAMILTON HIGHWAY

(Via Dundas St.)

Commencing at junction of Bloor Street and Mossom Road, grading was completed as far west as Dundas Street, a distance of 2.0 miles. Culverts were also constructed and one concrete bridge, 50 foot span, with 24 foot roadway, was constructed over Mimico Creek. Westerly to Summerville, the bituminous concrete surface was repaired by patching. The road was graded and surfaced (concrete base with asphaltic top) from Summerville to Cooksville, a distance of 3 miles.

From Cooksville westerly for 3/4 of a mile the grading and ditching was done, and an asphaltic concrete pavement on 5 inch concrete base continued. Between Cooksville and 16-Mile Creek the road was generally maintained and 42 culverts built. The bridge at 16-Mile Creek was completed and opened for traffic. Grading was completed from 16-Mile Creek westerly to Clappison's Corners, and all necessary culverts constructed. A 5 inch macadam base was laid from the eastern boundary of Nelson township to the east side of Nelson Mountain Cut.

Westerly through the township of E. Flamboro to Clappison's Corners, a distance of 3¾ miles, the grading was completed. Culverts were also constructed across the township, and a macadam base laid through Waterdown village and westerly one mile towards Clappison's Corners.

From Clappison's Corners the highway runs south-easterly along the boundary between E. and W. Flamboro townships, a distance of approximately 1.6 miles, where it forks, one route running south-westerly into Hamilton, and the other easterly to connect with the Toronto-Hamilton highway. These roads, together with the three high-level bridges which were completed in 1921, are known as the Hamilton Entrance Scheme. Good progress was made with the large rock cut at Clappison's and grading and approaches to these bridges. The necessary culverts were also completed. Some grading was done in preparation for the surfacing contemplated for next year's programme.

HAMILTON-KITCHENER HIGHWAY

The suburban area of the city of Hamilton extends from Dundas Forks (Binkley's Corners) to Christie's Corners (excluding the town of Dundas), a distance of 4.5 miles. During the season of 1921, in Ancaster township between Binkley's Hollow and Dundas, a large culvert 12 feet by 8 feet by 161 feet was started and the Hollow was surfaced with crushed stone. Approximately 3.0 miles of ditching was done and two concrete culverts were constructed in Flamboro village.

Commencing at the top of Dundas Mountain, an asphaltic concrete pavement was laid on a macadam base for a distance of 4.75 miles westerly. Dundas Mountain was also macadamized for a distance of 3,550 feet.

Between the eastern boundary of Beverley township and the village of Rockton, 2.5 miles of road was graded and standard ditches constructed. The macadam base was completed to Rockton village. Seven concrete culverts were built in Beverley township, and the road was oiled through the villages of Rockton and Sheffield. South of Galt a macadam base was laid a distance of 2.6 miles to connect up with that already laid in 1920. The road was widened from toll

HAMILTON-KITCHENER PROVINCIAL HIGHWAY
Asphaltic concrete pavement 20 feet wide south of Galt.

gate to Elgin Street, and a 20 foot macadam base constructed, and from the toll gate to Little's Corners one mile of standard ditch was constructed.

From Galt to Preston only maintenance was undertaken.

Between Preston and Kitchener, 3 miles of the road was graded and widened to 30 feet in preparation for the concrete pavement which is proposed to be built next year.

PORT CREDIT-OWEN SOUND HIGHWAY

Grading was completed between Port Credit and Cooksville, culverts were also built on this section and a macadam base was constructed. This section was built to connect the Toronto and Hamilton highway with Dundas Street.

From Cooksville to Brampton only light maintenance was undertaken, but nearly all culverts were completed to allow for continuation of grading and macadam base in 1922.

Grading was carried on for a distance of 2 miles north from Brampton. Gravel was also placed on this new surface and a light maintenance coat continued through to Orangeville, making this a first-class gravel road.

North of Orangeville, grading was completed to the hamlet of Camilla, a distance of 8½ miles. Culverts were also completed on this section, which was later gravelled. From Camilla to Shelburne dragging was done, but no construction was undertaken. Commencing at Shelburne, a light coat of gravel was applied through to Flesherton, Markdale and Chatsworth, and later to Owen Sound.

ARTHUR-KINCARDINE HIGHWAY

From the intersection of this road with the Guelph-Owen Sound highway, the road was graded westerly for about 3/4 of a mile and a macadam base constructed. The greater part of the highway between Arthur and Harriston was lightly gravelled and some light grading done where necessary. Westerly from Harriston for four miles the road was gravelled. Gravel was also applied

through the village of Clifford and westerly for two miles. One mile of heavy grading was done between Clifford and Mildmay and the road through Mildmay received a light coat of gravel. From Mildmay to Walkerton general maintenance was carried out and the road patched with gravel where required. The road was gravelled for a distance of 2 miles on either side of the Brant-Greenock township boundary, a short stretch of heavy grading was done a few miles west of Walkerton, and 2 steel bridges erected over the branches of the Teeswater River, one of 30 feet span and the other a semi-through truss of two spans, each 75 feet long. Eight culverts were constructed between Walkerton and Kincardine, preparatory to grading in 1923, and twelve miles of the highway east of Kincardine was lightly gravelled.

Ontario Provincial Highway
Applying Calcium Chloride on Gravel Surface as a dust preventative.

REPORT ON COUNTY AND TOWNSHIP ROADS

By DISTRICT ENGINEERS

Toronto, June 21st, 1922.

W. A. McLean, Esq.,
Deputy Minister of Highways, Ontario.

Sir:

I have the honour to submit a report on work carried out on the County and Township roads in the Counties of York and Peel.

Yours respectfully,

Arthur Sedgwick,
District Engineer of Municipal Roads.

YORK COUNTY

On the Sutton Road in East Gwillimbury, and between Sutton and Jackson's Point and westerly on the baseline in North Gwillimbury, 4 miles of waterbound macadam was built. This work also received a surface treatment of tar. The macadam varied from 16 to 18 feet in width and from 7½ to 10 inches in depth. The total cost was $66,500.16. Between Queensville and Belhaven, and from lot 7 to lot 20 in Georgina, 4 miles of heavy gravelling was distributed at a cost of $16,000.00. The abutments for the Crousberry bridge over the Black River in Georgina township were completed at a cost of $18,226.17. The depth to which the footings had to be carried made this a very difficult and expensive piece of work. The superstructure is being built in 1922.

In Newmarket, 3,578 feet of asphaltic concrete pavement was completed on a base which was commenced the year previous. On the Kennedy road 1¼ miles of bituminous macadam pavement 20 feet wide was built, south from the C. N. R. crossing in Con. C, Scarboro, at a cost of $38,416,04. Two and one-half miles of waterbound macadam with tar surface were built north of Unionville, and another three-quarters of a mile was built on the Whitchurch-Markham townline. One and a quarter miles of gravelling was also done on this road in Markham and Whitchurch townships. On the Vaughan road, seven-eighths of a mile of 20-foot bituminous macadam pavement was constructed between Mulberry and Oakwood streets at a cost of $23,495.88. Between lots 1 and 5 in King township, 6,600 feet of waterbound macadam with tar surface was built at a cost of $33,465.15. In addition to the above, a foundation course was commenced in Vaughan township preparatory to building a bituminous macadam pavement in 1922. On the Weston road about one mile of asphaltic concrete pavement 20 feet wide was constructed at a cost of $49,000 per mile, and in the village of Woodbridge 3,049 feet of 18-foot bituminous macadam was built at a cost of $29,800 per mile. Adjoining the south end of this, 2,300 feet of waterbound macadam with tar surface was built. In King Township, a half-mile of gravelling was done. On the Don Mills road, 3,633 feet of 20-foot asphaltic concrete pavement was built through the Todmorden district at a cost of $44,700 per mile, and a 90-foot span, 20-foot roadway, concrete bowstring arch bridge was constructed over the Don River at a cost of $25,000. On the Langstaff road, 3 miles of waterbound macadam was built east of Markham. On Road No. 10, 2¼ miles of macadam and gravel road was built. On the Mt. Albert road 3 miles of grading and nearly 2 miles of gravelling was done, and on the Pine Orchard road 1 mile of gravelling was done. On the Lloydtown road four miles of heavy grading and gravelling was done between Aurora and Schomberg at a cost of $17,500, and a further stretch of nearly one mile of gravelling was put on east of Aurora. On the Lansing road, 1½ miles of waterbound macadam was built west from the Kennedy road. On Road No. 18, one-half mile of waterbound macadam was built north from Long Branch.

The above is a brief resume of the chief work carried out on the county roads during 1921. The total expenditure amounted to $671,671.30, of which some $60,000 was expended for general maintenance.

The experiences of the last two or three years compels one to conclude that in the southern area of the county the density of the traffic radiating from Toronto necessitates the very best and strongest type of construction, and the area embracing this heavy traffic is steadily expanding. The congestion will probably only be partially and temporarily relieved when the Provincial Highways reach their full efficiency. The county authorities are recognizing this condition by rebuilding the ordinary macadam roads with asphaltic concrete and bituminous macadam. On the northern lateral roads good gravel and waterbound macadam roads will be the most economical type to build for some years to come.

Township Work

With the exception of King, all the townships participated in Government aid for township work. In the north, where gravel is available, considerable improvement is made in the local roads with comparatively small expenditure. In the townships surrounding the city of Toronto there is an extensive urban area with comparatively low assessments. In this area large expenditures are necessary to keep the roads from becoming impassable during the spring and fall seasons.

PEEL COUNTY

With the exception of the Brampton sideroad, Peel County roads are subjected to traffic which is more purely local. Road improvement is, therefore, spread around in shorter stretches than would otherwise be required. Construction work consisted chiefly of stone and gravel surfacing and was distributed over the various townships as follows: Caledon, 1¾ miles; Toronto Gore, 2 3-8 miles, and Toronto township, 14½ miles. Toronto township had a large unexpended ba ance from the preceding years, which accounts for the larger programme carried out in that township during 1921. The total expenditure amounted to $131,727.28, including some $30,000 for maintenance work.

Township Work

All the townships availed themselves of the usual Government aid for township road work. Toronto township did a large amount of grading work in addition to a moderate amount of gravel and stone surfacing.

TORONTO, January 30th, 1922.

W. A. MCLEAN, ESQ.,
Deputy Minister of Highways, Ontario.

SIR:

I hereby beg to submit a summary report of the county and township road work as carried out in the counties of Elgin, Essex, Kent, Lambton and Middlesex and the townships therein under the Highway Improvement Act and the Ontario Highways Act.

It is gratifying to note on county work in this district that the spreading of gravel is receiving more attention. Experience has shown that a thin layer of new gravel spread two or three inches thick over the old surface and carefully dragged produces a surface that is smooth and permits a larger mileage to be resurfaced. Numerous gravel pits have been purchased by all the counties. All five counties are operating motor trucks for gravel distribution.

PELEE ISLAND TOWNSHIP ROAD
Gravel surface sixteen feet wide.

Essex County Road

Bituminous macadam surface 18 feet wide on the "Pike Road," east of Amherstburg.

It is gratifying to find the townships taking up the matter of township aid. In 1920, 16 townships out of a total of 57 participated, while in 1921, 50 townships participated, and the probability in 1922 is that 55 out of the 57 will be participating. The improvement of the sideroads and concession roads is a live issue in all municipal councils.

With regard to statute labour, 35 townships have abolished or commuted statute labour in this district and 22 still retain statute labour. Since the inauguration of Government aid to townships in the year 1920, 20 out of the above 35 townships abolished or commuted statute labour.

Numerous visits were paid throughout the season to the township, officials where matters of special importance were considered.

Labour conditions for 1922 look to be very promising, and in those counties of Kent and Essex considerable reduction in concrete pavement prices seem to be evident.

Respectfully submitted,

J. A. P. Marshall,
District Engineer of Municipal Roads.

ESSEX COUNTY

Essex County during 1921 spent over $511,000.00 on the County Road System. To the end of 1921, since the county first entered the system, the expenditure has amounted to $1,182,954.78, on which the county received a grant of over $524,000.00.

During the year Essex County constructed about 6 miles of concrete roads at the following locations:

(1) Leamington, No. 31, 4,900 lin. feet. (Day labour.)
(2) Howard Ave., No. 4, 16,720 lin. feet. (Suburban Roads.)
(3) Maidstone, No. 86, 5,700 lin. feet. Contract.
(4) Belle River, No. 86, 2,900 lin. feet. Contract.
(5) Pike Creek easterly No. 86, 3,700 lin. feet. Contract.

It was hoped that some improvement would have been done on the River Road between Amherstburg and Windsor, but the matter will probably be given first consideration in 1922.

The work in Harrow consisted of a bituminous macadam pavement which was completed with the exception of the seal coat, which will be done early in 1922.

Considerable gravelling was done and it is giving splendid results. This gravel is shipped from the Hickey pit at Leamington to the various railway points within the county and then teamed to the particular locality. About 40 miles of new gravelling was done during 1921, while about 20 miles were resurfaced. In addition to the loading and shipping sufficient gravel for the county roads, the Department of Public Highways and various local municipalities were supplied with over 300 cars of gravel. With regard to bridges and culverts, 5 bridges

of 12 to 18-foot spans were constructed and 12 reinforced concrete culverts from 4 to 9-foot spans.

Work on the Windsor Suburban Roads consisted of the building of Howard Avenue concrete roadway as outlined above. Three concrete culverts were built on Road No. 1 in Sandwich West and 2 miles of grading and gravelling on Road No. 6 from Walker Road easterly.

The following table shows the mileage of the various types of road at the end of 1921.

Type	Provincial Highway Miles	Provincial County Miles	County Miles	Township Miles	Total Miles
Earth	12.41	45.50	89.32	589.25	736.48
Gravel	44.42	5.00	107.25	287.50	444.17
Stone	....	5.50	4.50	8.00	18.00
Bit. Macadam	....	2.00	0.50	....	2.50
Concrete	2.75	6.50	8.38	6.00	23.63
Total	59.58	64.50	209.95	890.75	1,224.78

Percentage of roads surfaced—39.86%.

Township Work

The following townships in Essex County took up the matter of Township Aid: Anderdon, Colchester South, Gosfield South, Maidstone, Mersea, Rochester, Sandwich East, Tilbury North and Pelee Island. Of these, Colchester South, Gosfield South, Maidstone, Rochester and Sandwich East have township road superintendents; Mersea and Anderdon still retain statute labour. The approved expenditure made by the above townships on township work for 1921 amounted to approximately $64,000.00. Special mention should be made of the organization and work as carried out in South Gosfield township. The following townships will probably take up the matter of township aid in 1922: Malden, Colchester North, Gosfield South, Tilbury West.

ELGIN COUNTY

A systematic maintenance of gravel roads has been carried out during 1921 in Elgin County. During the year approximately 150 miles of resurfacing was done. The chief work done during the year was the construction of Silver Creek bridge opposite lot 17, concession 1, Malahide. The new reinforced concrete bridge is 100 feet in length with a 16-foot clear waterway and 12 feet high. The fill and earthwork necessitates the moving of approximately 15,000 cubic yards of earth. The bridge was built by the county by day labour.

During the year a new 5-ton motor truck was purchased. This, along with the two trucks (5-ton) purchased in 1920, makes a fleet of 3 trucks operated by Elgin County.

The method of applying gravel and keeping the surface of the county roads in good condition is to be commended. There remains only 19 miles of county roads not surfaced out of a total of 262 miles. When it is taken into consideration that Elgin County took up the matter of county roads in 1917, it speaks well for the organization and the work that has been done by the county officials.

The following table shows the mileage of various types of road at the end of 1921:

Type	Provincial Highway Miles.	Provincial County Miles.	County Miles.	Township Miles.	Total Miles.
Earth	1.70	....	19.00	336.25	356.95
Gravel	56.60	35.25	192.57	507.75	792.17
Stone	....	3.50	12.00	4.75	20.25
Total	58.30	38.75	223.57	848.75	1,169.37

Percentage of roads surfaced—69.47%.

Township Work

All the townships in Elgin County are taking the Government aid. The work in North Dorchester, Yarmouth, Malahide, Dunwich and Bayham, is directed by township road superintendents. During 1921, the township of Yarmouth purchased a motor truck and loading bin at a cost of $10,000. All the townships in Elgin County have either commuted or abolished statute labour. 1921 expenditure on township work (approved) amounted to $128,797.19. Special mention should be made of the good work carried out by South Dorchester and Yarmouth townships during 1921.

KENT COUNTY

Kent County during 1921 spent on the County Road System $567,930.48. Since 1917 the total expenditure made by the county has been $889,552.25, so that the expenditure made in 1921 was by far the largest outlay for any one year. During the year, 12 miles of concrete roads were constructed. The contract prices ranged from $2.60 to $3.83 per square yard. On the Chatham Suburban Roads, Provincial County Road No. 62, 2.75 miles of concrete pavement was constructed, 18 feet in width. From the end of this at the Gregory drain to Cedar Springs, gravelling was done. Other stretches of concrete pavements were built in the vicinity of Paincourt, Tilbury, N. Thamesville and east from Wallaceburg. Greater care should be given to the matter of efficient concrete inspection. The proper completion of side-ditches and shoulders on these concrete roadways should receive prompt attention.

Special grants were made to the urban municipalities of Wallaceburg, Ridgetown, Blenheim, for the purpose of building connecting links of the County Road System.

During the year 15 acres of gravel was purchased by the county just west of Cedar Springs on Talbot Street and a storage bin and loading equipment was erected. Two motor trucks were purchased. With the trucks and teams about 25 miles of gravelling has been done and the work is standing up in first-class condition. The Duffis Creek Bridge just south of Thamesville was completed, as was also Otter Creek Bridge north of Wallaceburg.

The following table shows the mileage of various types of road at the end of 1921:

Type	Provincial Highway Miles.	Provincial County Miles.	County Miles.	Township Miles.	Total Miles.
Earth	25.56	29.98	107.87	909.50	1,072.91
Gravel	61.80	36.50	56.50	305.50	460.30
Stone	.....	1.00	.....	.....	1.00
Concrete	0.50	10.27	3.13	.....	13.90
Total	87.86	77.75	167.50	1,215.00	1,548.11

Township Work

All the townships (10) in Kent County participated in the 20 per cent. aid to townships for 1921. The township of Zone appointed a township road superintendent. The townships of Harwich, Orford, Raleigh and Romney still retain statute labour.

LAMBTON COUNTY

During 1921, Lambton County resurfaced about 80 miles of county roads with gravel. Three new motor trucks were purchased in 1921, and this, along with two trucks purchased in 1920, makes up a fleet of 5 trucks. Considerable hill cutting has been done at Wilkesport and between Alvinston and Waterford. A number of substantial bridges have been constructed during the year, chief of which were Telford bridge and Bradshaw bridge. The concrete work on bridges and culverts throughout has been of a good character and shows the benefit of efficient inspection and supervision. More attention has been given to the matter of spreading gravel and the results are beginning to show the benefits.

The following table shows the mileage of various types of road at the end of 1921:

Type.	Provincial Highway Miles.	Provincial County Miles.	County Miles.	Township Miles.	Total Miles.
Earth	.....	28.50	123.75	762.00	914.25
Gravel	37.98	56.00	123.25	518.00	735.23
Stone	.....	.....	5.25	.....	5.25
Concrete	2.50	.....	.....	.....	2.50
Total	40.48	84.50	252.25	1,280.00	1,657.23

Percentage of roads surfaced—44.83%.

Township Work

All the townships in Lambton County, with the exception of Dawn Township, took advantage of Government aid during 1921. The townships of Brooke, Euphemia, Plympton and Warwick still retain statute labour. The total approved expenditure for 1921 on township road work was $122,227.00.

MIDDLESEX COUNTY

The county's expenditure on county roads for 1921 amounted to $218,599.01. Approximately 125 miles of resurfacing with gravel has been completed. The county graded approximately 12 miles and gravelled 12 miles of the system during the year. Considerable hill cutting has been done in the vicinity of Parkhill and in McGillivray Township.

A gasoline gravel loader was purchased during the year and has given good satisfaction. The county purchased one motor truck and turned in one of their used trucks (5-ton) and obtained a new 3½-ton truck. This makes a fleet of four motor trucks for the county. The operating of these motor trucks has cut the cost of gravelling less than half of what it formerly was with teams.

After a few years' delay on the London Suburban Roads, plans are under way for the improvement of the roads during 1922.

A grant was made to the village of Glencoe for the purpose of building a concrete pavement on the main street of the village.

The following table shows the mileage of the various types of road at the end of 1921:

Type	Provincial Highway Miles.	Provincial County Miles.	County Miles.	Township Miles.	Total Miles.
Earth	6.64	.....	28.30	440.50	475.44
Gravel	87.07	58.25	352.20	1176.50	1,674.02
Stone	.....	.....	2.00	3.00	5.00
Concrete	5.50	.....	.....	.....	5.50
Total	99.21	58.25	382.50	1,620.00	2,159.96

Percentage of roads surfaced—77.98%.

Township Work

All the townships in Middlesex County took advantage of the Government aid in 1921. The townships of McGillivray, Lobo, and Delaware appointed township road superintendents. The townships of Mosa, West Nissouri, Biddulph, North Dorchester and London townships still retain statute labour. The appropriated expenditure on township roads in Middlesex county amounted to $180,000. Special mention should be made of the system and organization as carried out in Lobo township.

Toronto, May 15th, 1922.

W. A. MacLean, Esq.,
Deputy Minister of Highways, Ontario.

Sir:

I have the honour to submit a summary report on the work carried out on county and township roads during the year 1921 in the counties of Carleton, Prescott and Russell, Renfrew, and Stormont, Dundas and Glengarry.

Most of the townships, with the exception of those in Renfrew which are receiving Colonization Aid, availed themselves of the aid as provided for in the 1920 legislation of the Ontario Highways Act, and the present outlook is that the few remaining townships will shortly fall in line. Statute labour has been either commuted or abolished in the majority of the townships and, with the possible exception of Renfrew County, Statute Labour should be a thing of the past in the very near future in this district.

It is gratifying to report that the programme carried out showed a tendency towards greater continuity in construction and a fuller realization that drainage is the first principle of construction.

Respectfully submitted,

C. W. Cornell,
District Engineer of Municipal Roads.

CARLETON COUNTY

The county of Carleton, including the suburban roads, had 284 miles of roads in their County Road System at the end of 1921. Of this mileage some 51 miles were designated as Provincial County Road and the rest as County Road. Of this about 30 miles are suburban roads adjacent to the city of Ottawa.

A large programme of work was carried out during the past season which involved in all a total approved expenditure of $807,855.25. Of this, approximately $358,000 was spent on the suburban roads, while the remainder was distributed throughout the County Road System. The work on Provincial County Road No. 89, known as the Metcalfe Road, consisted of the

Carleton County Road

Asphaltic concrete surface 20 feet wide on Metcalfe Road, Ottawa Suburban Roads Commission

construction of 4 miles of waterbound macadam roadway from the Dundas County boundary northerly through the village of Vernon. In addition to this, 3 miles of grading was completed along with the necessary tile and small concrete culverts. On several county roads throughout the county some 16 miles of grading was completed in addition to the construction of 10 miles of stone road and 15.83 miles of gravel road. The outstanding work completed by the Ottawa Suburban Roads Commission was 9.2 miles of waterbound macadam roadway, which was constructed on the Metcalfe Road from near Billings' Bridge to the Osgoode boundary. Part of this road had a bituminous surface treatment and the outlook is that in the very near future the greater part, if not all, of this road will have a surface of asphaltic concrete. In addition to the above, the Suburban Roads Commission completed one mile of waterbound macadam on the Richmond Road and 1.38 miles on the Bowesville Road and also 4.75 miles of grading on the Russell Road. Three bridges were constructed by the Commission during the season, varying in span from 12 to 18 feet. The most important of these was the Sawmill Creek bridge, a reinforced concrete structure carrying a heavy fill, built on the Metcalfe Road near Billings' Bridge at a total cost of $13,393.00.

Quite a large bridge programme was carried out in the county, nine structures being completed, varying in span from 10 to 59 feet. The most important of these were the Carlsbad Springs bridge and the Stevens' Creek bridge. The former is a 50-foot span and the other a 59-foot span. Both are of steel superstructure on concrete abutments. In addition, the Kenmore bridge was constructed on County Road No. 7. This is a two-span structure on concrete abutments and pier, one span being 50 feet and the other 72 feet.

Township Work

All the townships in the county took advantage of the aid available under the Ontario Highways Act, and all but two townships appointed road superintendents. Four out of the ten townships in the county have abolished statute labour, five townships have commuted it and one still retains statute labour.

UNITED COUNTIES OF PRESCOTT AND RUSSELL

The United Counties of Prescott and Russell adopted a County Road System in 1916. The system at that time consisted of 225 miles of the leading roads throughout the United Counties. As it now stands it consists of eight miles of Provincial County Road, and 223 miles of County Roads. It was evident at the outset that a very large programme of maintenance and construction would eventually have to be undertaken to get even the leading roads of the County System in passable shape for the ever increasing motor traffic. The county officials apparently realized the situation as is evidenced by the steady increase in their county road appropriations. The approved expenditure in 1921 amounted to $656,026.06.

The outstanding single piece of work during the season was the construction of 5½ miles of bituminous penetration road 16 feet wide on Provincial County Road No. 130, between

Hawkesbury and Vankleek Hill. In addition, a large programme of work was carried out on several county roads throughout the system, consisting in all of some 5.95 miles of grading, 20.16 miles of stone road, 6.62 miles of gravel road and 5.25 miles of bituminous penetration surface. A large bridge programme was also carried out during the season, eleven structures in all being completed. These varied in span from 12 to 40 feet and consisted for the most part of steel superstructure on concrete abutments.

Township Work

Nine out of the eleven townships in the United Counties took advantage of the aid available under the Ontario Highways Act, Longueil and Caledonia being the two exceptions. All of the townships which passed the necessary expenditure by-laws appointed road superintendents. Seven of the eleven townships have commuted statute labour, one has abolished it, and three still retain statute labour.

RENFREW COUNTY

The easterly portion of Renfrew County, consisting of ten townships, adopted a County Road System in 1917. Comparatively little, except organization and preliminary work, was done until the year 1919. Since then, however, the amount of money appropriated for county roads has gradually increased, amounting this year to a total approved expenditure of $450,607.62.

The County Road System at the close of 1921 consisted of 47.5 miles of Provincial County Roads and 172.5 miles of County Roads, a total of 220 miles, which is approximately 23 per cent. of the total road mileage in the area covered by the County Road System.

The physical features of Renfrew County are such that many costly construction problems are presenting themselves, especially on Provincial County Roads, which some of their more fortunately situated neighbours do not have to contend with. The rocky and winding nature of many of the leading roads necessitates a large amount of rock work to give the necessary clear line of vision and also to bring them to the Departmental standard. The result is that the cost per mile for construction, no matter what type of road is constructed, in a great many cases will run much higher than in more favourably situated counties.

The work on Provincial County Roads this season consisted of the construction of 7.3 miles of crushed stone road, in addition to grading 6.85 miles and building the necessary culverts preparatory to construction next year. The town of Renfrew received a grant on their Provincial County Road connecting link.

The County road work consisted of grading 2.25 miles and the construction of 6.2 miles of crushed stone road and 31.3 miles of gravel road. In addition, one 20-foot span reinforced concrete bridge was built on Provincial County Road No. 96, while the County Road bridge work consisted of some four structures varying in span from 10 to 36 feet. The 36-foot span was composed of a concrete substructure with a steel superstructure.

Township Work

The townships in the area covered by the County Road System are receiving Colonization Road aid so that they were not eligible for the grant under the Ontario Highways Act.

UNITED COUNTIES OF STORMONT, DUNDAS AND GLENGARRY.

The United Counties of Stormont, Dundas and Glengarry adopted a County Road System in 1916. The system at that time comprised some 433 miles of the main thoroughfares throughout the United Counties. The system as it now stands consists of 122 miles of Provincial County Roads and 292.5 miles of county roads.

The roads at the time the system was designated were for the most part in poor condition and suffered largely from want of maintenance. This necessitated a somewhat large and progressive programme as the problem was to keep passable the maximum amount of ordinary roads while construction or extensive improvement was taking place on the more important roads. How well this programme has succeeded is shown by the fact that of the 122 miles of Provincial County Roads, 28.5 miles are built of gravel, 51.5 miles are of stone and 25 miles of bituminous surface; and of the 292.5 miles of County Roads, 94.5 miles are of gravel, 92.5 miles are of stone and 20.5 miles of bituminous surface, so that it is apparent that the greater portion of the County System has received at least a coat of metal. The unmetalled portion has received considerable draining and grading in preparation for future construction.

The United Counties undertook a very large programme of work during the past season. In all, some 30 miles of waterbound macadam roadway were constructed on Provincial County Roads. This included the grading, metalling to the full 16 feet in width and the laying of pipe and tile culverts and the building of small concrete culverts. A considerable proportion of the stone roads will eventually receive a bituminous surface treatment. The average cost of the work was approximately $12,125 per mile. A similar extensive programme was carried out on County Roads, approximately 27 miles of waterbound macadam roadway being constructed up to the County Road standard at an approximate cost of $11,725 per mile. One of the first

difficulties met with in these counties when construction is attempted is the narrow right-of-way which is characteristic of several of the eastern counties. The counties, however, are adhering to the policy of widening the right-of-way before starting construction. The bridge construction programme was not an extensive one and consisted mainly of four small concrete structures of 16-foot span with the usual width of roadway.

In addition to the above, a large programme of maintenance and repair was in evidence throughout the counties, some $107,898.57 having been spent in this manner. Continuous stretches of loose stone or gravel were applied in many cases, which will serve as a base for future work and in the meantime will keep the traffic out of the mud and give the people a reasonably passable road until such time as construction can be undertaken.

If the present rate of construction can be maintained in these counties together with a suitable appropriation for maintenance, bad roads on the County Road System should in the near future be a thing of the past.

Township Work

All the townships in the United Counties with the exception of Lochiel took advantage of the aid available under the Ontario Highways Act, and with the exception of Osnabruck and Matilda, road superintendents were appointed by each township. Eight out of the twelve townships have abolished statute labour, one has commuted, one partially commuted, and two still retain statute labour. The outlook, however, is that in the very near future statute labour will be entirely abolished in the United Counties.

Toronto, April 13th, 1922.

W. A. McLean, Esq.,
Deputy Minister of Highways, Ontario.

Sir:

I have the honour to submit a summary report on the work carried out under the Highway Improvement Act during the year 1921 in the counties of Ontario, Victoria, Durham and Northumberland, Peterboro and Prince Edward, in pursuance of the provisions of the said Act.

With the exception of Ontario County substantial additions were made to the number of townships taking aid under the Act in all the counties. There still remain a few townships however, which for one reason or another have not come under the Act. It is to be hoped that these will soon avail themselves of the provisions of the Act. As councillors and reeves of the township the county councillors get their primary education in road building. In those counties where the townships are taking aid a noticeable improvement may be seen over those which are not. It is shown in the character of the work undertaken and the manner of carrying it out.

Considerable work of a permanent nature in the building of bridges and culverts, putting down of macadam road and hill cutting was undertaken during the year throughout the counties. The usual maintenance was carried out on the roads as well.

The construction of roads is in a large measure a question of labour. In this connection a noticeable advance has been made in the organization and direction of the labour element. Efficiency was the keynote of the summer's work. It is well this is so. Owing to the lowering in the cost of wages there is grave danger of efficiency being lost sight of, with the inevitable result of a higher cost per mile of road. In addition, labour is becoming more plentiful, so that officials are not so chary in demanding efficiency from labour.

The system of financing followed in these counties is the same. That is, they levy a tax of so many mills for County Road purposes. The expenditure upon the roads can then be said to come from the county's income. They are not touching their borrowing power or their capital account. It is a system that is absolutely safe and sound as it leaves their capital unimpaired.

Respectfully submitted.

John MacVicar,
District Engineer of Municipal Roads.

ONTARIO COUNTY

The total road mileage for this county is 1,550 miles. Seventy per cent., or about 1,085 miles, of this is surfaced with gravel, stone or bituminous penetration. This is a creditable showing for the county. Of this mileage 153 miles are County Roads, 58 miles are Provincial County Roads, and 42 miles are Provincial Highways.

At the inception of the County Road system in this county a wise policy was adopted by the officials. They have consistently kept in mind the permanent features of the road problem. A large proportion of their expenditure was made upon the following features, viz.: alignment, drainage, structures, foundations, and grades. That is, their expenditures have been made in the nature of investments and upon which they will reap a large interest in the way of lessened cost of maintenance on these roads as time goes on. I am sure it cannot but be gratifying to

the Department to know that for practically all monies paid out to this county, work of a permanent nature can be seen for it. A total of $89,965.00 has been expended by the county on concrete culverts and bridges to date. The total amount paid by the Department in grants is only slightly in excess of that amount.

It is now four years since the County System was adopted in this county and during that time they have constructed 42 reinforced concrete culverts out of a total of about 120, and 20 bridges of reinforced concrete or steel out of a total of about 35 on the system. In 1921, the county constructed 21 reinforced concrete culverts and 6 concrete bridges at a cost of approximately $33,500.00. The work for the most part was carried out under contract. On the construction of the Provincial County Roads, $8,454 has been expended, and on maintaining them $20,411 has been expended. Upon County Roads there has been expended $21,179 on construction and $49,758 on maintenance. These sums include expenditure upon permanent features such as alignment, ditching and foundations and grade reductions. The perishable features of the highways also came in for considerable attention. Long stretches of the roads were gravelled.

Township Work

The township roads comprise a total of 1,290 miles. Of this mileage about 460 is earth road, 790 gravel and 42 broken stone. Of the township roads there is 64 per cent. surfaced. A number of concrete culverts of approved design were built by the different townships. In addition, considerable resurfacing was done with gravel.

VICTORIA COUNTY

The southern six townships of Victoria County have a grand total of 948 miles of road. Out of this, there are about 13 miles of Provincial Highways, 190 miles of County Roads and 745 miles of Township Roads. On the County Roads 184 miles are gravelled and 6 miles are earth. On the township roads about 205 miles are earth and 540 miles are gravelled.

During the past season the work for the most part was of an excellent nature. This results from a workable organization together with a good selection of road building machinery. The day labour system is in vogue and the wage item alone amounts to about 60 per cent. of the total expenditure, and this was left entirely in the county.

The type of road built was a macadam, rolled to a consolidated depth of about 8 to 10 inches. Field stone were crushed in the county's crushers and laid on the road, then rolled and finally treated with an application of oil. Of this type of road about 3½ miles were built. The average cost was $1.19 per square yard. Bolton Street, Bobcaygeon, was paved with a bituminous bound macadam. It is the business street of the village and it was thought advisable to pave the full width, supported by a curb and gutter.

Grade reductions were carried out in two rock cuts at Fenelon and Kelley's Hill; also earth hill reductions at Logan's Hill and Crawford's, Omemee. In addition a valuable improvement has been made to the system at Riaboro. At this point two level railroad crossings have been eliminated on the road leading from Lindsay to Peterboro. During the season 2 bridges, 15 box culverts, 59 pipe culverts and about 2,000 feet of tile drains were constructed.

Township Work

The township roads comprise a total of 745 miles. Of this, mileage about 205 are earth roads, about 497 are gravel and about 43 stone. Nearly 70 per cent. of the township roads are surfaced with either gravel or broken stone. This being the first year the townships in this county took advantage of Government aid, a great deal of the work was below standard. A number of culverts and some bridges were built, however, that were of approved design. Considerable resurfacing was done with gravel.

DURHAM AND NORTHUMBERLAND

In these United Counties there is a grand total of 2,658 miles of road. The Provincial Highway takes out 78 miles and of the balance 365 are county roads and 2,215 township roads. The county roads have 345 miles gravelled and 20 miles of earth. During the past season about 5 miles of gravel road were constructed. Of this amount, 3 miles were on Provincial County Roads and 2 miles on county roads, at a total cost of $42,000.00. In addition to this expenditure, nearly $50,000 was expended upon maintenance and repair of the roads. Four large bridges were constructed during the year at a cost of $11,500. The special grants to towns and villages amounted to $14,000, which was expended upon construction in the various places. Considerable improvement is to be noted in these counties in the organization for handling the work. Larger units were employed with the result that the work came more closely under the direct supervision of the superintendent. As a consequence a very great improvement in the class of work done is noticeable. The counties require a better equipment of modern road building machinery and as this is provided further improvement in the road building organization will result.

Township Work

Practically all the townships in the United Counties of Durham and Northumberland are taking aid under the Ontario Highways Act. Some are working under a superintendent, but most of them are working under the reeve, as they have not yet abolished statute labour. Of the total 2,215 miles of township roads only 967 are gravelled. Thus 1,243 miles are still earth roads. In a county where road building material is plentiful this is a backward condition to find. However, a noticeable improvement is found in the interest taken in road building in the past few years. During the past summer a number of large bridges were built of approved design, also a number of concrete culverts. For the most part, however, the work consisted of resurfacing with gravel and some grading.

PETERBORO COUNTY

During the past season considerable construction work was done on the suburban roads. The type of road built is gravel, and 2½ miles were built. Abundance of good gravel is available within easy hauling distance, though much of it was crushed owing to the prevalence of an oversize of stone. Grading outfits prepared the subgrade. Upon the county roads, resurfacing and patching was the main work undertaken.

At the inception of the County Road System in the county it is doubtful if the farmers seriously considered their income in relation to the mileage taken on. The grand total of mileage in the southern half of the county is 808 miles. Of this, 8 miles are Provincial Highways, 252 miles Provincial County and County Roads, and 548 miles are township roads. The funds provided to look after this 252 miles is about $20,000. With so small a provision of funds, the mileage should be small in proportion, so that the amount would adequately care for the mileage.

Township Work

In Peterboro County there are six townships taking aid under the Act. Of these, Otonabee, Smith and Monoghan carried out quite extensive programmes consisting of grading, gravelling and some culverts of approved design. The township roads in this county comprise a total of 548 miles; of this, 184 miles are earth, 348 miles gravel and 15 miles stone.

PRINCE EDWARD COUNTY

There is a grand total of 603 miles of road in the county of Prince Edward. Of this mileage there is 29 miles of Provincial Highways, 126 miles of Provincial County and County Roads, and 447 miles of Township Roads. The County Roads have 25 miles gravelled, and 96 miles stoned. The townships have 3 miles stoned, 287 miles gravelled and 157 miles of earth.

During the past season the work for the most part was good. The type of road built was a water bound macadam. A block of about 500 feet in length was laid in the town of Picton of bituminous penetration. Quarries are opened at advantageous points along the roads and crushing outfits installed. The material is hauled an economic limit of about 1½ miles each way from the crusher and rolled in the road. Grading outfits prepare the subgrade for the stone. In this manner over 5 miles of road were built in the county of Prince Edward during the past summer. In addition a few miles were resurfaced or patched. Upon road construction about $20,000 were expended; upon maintenance and repair about $36,000; on new machinery $3,800. The chief items of machinery purchased were a steam engine and a tractor.

Township Work.

There are only two townships taking aid in this county. In one the work consisted almost entirely of grading and gravelling, resurfacing being the largest item. In the other, a new bridge of approved design was built. They also did resurfacing but no road construction work was undertaken.

W. A. McLean, Esq., Toronto, June 21st, 1922.
Deputy Minister of Highways, Ontario.

Sir:

I have the honour to submit the following report on county and township road work during 1921 in District No. 2, comprising the counties of Bruce, Huron, Oxford, Perth and Waterloo.

In the counties whose management of assumed roads is of a purely county nature, very satisfactory improvements were accomplished. A creditable mileage of road was brought up to Departmental standard, with particular attention to drainage and foundations; gravel resources were being studied and mobilized; road surfaces received increasing and effective patrolling, and the actual costs in each instance reflected the superiority of efficient organization.

Several counties, however, conduct their county road affairs on a township basis, as regards either management or financing, or both. They are, accordingly, of their own volition, labouring

under a serious disadvantage. The condition of the roads evidences a lack of systematic maintenance; results are not always commensurate with the costs; expenditures are not regulated, in every case, to fulfil the requirements of traffic. In numerous instances costly pieces of work have fallen below Departmental standards owing to lack of adequate county supervision and insufficient instruction to employees.

If, in fairness to those counties whose organization strictly conforms with the requirements of the Department, the same standard of workmanship were required of the counties who manage their county roads on township basis, the latter would benefit comparatively little from the financial assistance open to them under the Highway Improvement Act. Every effort is being made to revise and improve the systems referred to, the chief obstacle to reorganization being a hesitancy to depart from old customs.

All of the townships in the district, except the four in Bruce Peninsula receiving Colonization Aid, participated in the Provincial subsidy authorized by the Ontario Highways Act. Very encouraging improvement is evident, particularly in the townships that have abolished statute labour and have appointed road superintendents. From a survey of costs, involving over 300 records of work in the 55 townships concerned, the average cost of applying gravel by contract or day labour was 44½ cents per yard-mile (including loading and spreading) as against an actual equivalent of $1.09 per yard-mile by statute labour, or of $1.20 per yard-mile, adjusting all statute labour rates to common basis of $2.00 per day. There were approximately 130,000 days of statute labour performed in District No. 2 in 1921, representing a commuted value of over $240,000. Statute labour work being almost entirely confined to gravelling, if computed at a cost of 44½ cents instead of $1.09 per yard-mile, an equivalent mileage of road could have been resurfaced for $96,000, an average expenditure of $2,400 per township concerned. This expenditure amounts to approximately one mill on the average township assessment.

Municipal officials recognize that the old system is inadequate and wasteful, but the average ratepayer, not realizing it to the same extent, through lack of knowledge of what savings are being effected by townships that have abolished it, advocates its retention. Progress is being made, however, and in numerous townships a campaign towards the abolition of statute labour is under way.

All of which is respectfully submitted,

H. Irwin,
District Engineer of Municipal Roads.

BRUCE COUNTY

Bruce County Road system comprises 343.5 miles, being 17.3 per cent. of the total road mileage. With the exception of 9.5 miles of waterbound macadam, all the roads in the system are of gravel.

Provincial County Roads total 132.3 miles on which maintenance costs in 1921 averaged $182.00 per mile. Construction work was continued on the "Centre Road" through the peninsula. The year's programme of blasting and rock work in Albemarle was satisfactorily completed. The hauling of field stone, to provide a roadbed through the Eastnor swamp (approximately 2 miles in length) was about 95 per cent. completed, lack of snow depriving the workmen of sufficient winter roads to finish the section. The greater part of this stone was spread and prepared for gravelling. Ditches and culverts in the swamp section were completed. In Brant Township, 3¾ miles of waterbound macadam cost $8,400 per mile, complete.

County Road construction included 2¼ miles of crushed gravel on Road 21, westerly from Walkerton, at $10,100 per mile including hill-cutting and numerous culverts.

Bridge work cost $24,600 and $33,750 on Provincial County and County Roads respectively. The former included two 55-foot reinforced concrete trusses in Huron Township and a complete new substructure and floor for Rae's Bridge north of Paisley. Eleven bridges were built on County Roads, the largest span being 122 feet, over the Sauble River, near Hepworth.

A total of $8,000 was spent on new machinery, including one steam tractor, fourteen light graders, eight dump wagons, two concrete mixers and twelve drags.

Labour costs decreased during the year from 35 cents to 25 cents per hour for men and from 65 cents to 50 cents for teams. Stone and gravel crushing averaged 60 cents per cubic yard elevated to bins, the figure being above normal owing to the crushing of considerable quantities of field stone in localities devoid of gravel. Concrete work averaged $10.00 per cubic yard, steel supplied.

The chief connecting link construction took place in the towns of Walkerton and Wiarton. The former laid a 2½-inch bitulithic pavement on a 6-inch concrete base, costing $57,000 for paving at $3.60 per square yard. Wiarton added approximately one-half mile of one-course concrete pavement to the portion completed in 1920, at a cost of $2.48 per square yard.

At the close of the year Mr. D. J. Izzard resigned from the office of County Road Superintendent after 40 years' service in county and municipal affairs. The offices of County Engineer and Road Superintendent were combined and G. E. Stephenson, B.A.Sc., was appointed, with G. H. Ruttle as Assistant Road Superintendent.

In 1921 the cost of engineering and supervision amounted to 3.1 per cent. of the expenditure, as compared with an average of 3.7 per cent. for the two previous years.

Township Work

Of the sixteen townships, the four peninsular municipalities received Colonization Aid; the remaining twelve participated in the 20 per cent. grant. The total approved expenditure amounted to over $125,000 for a township road mileage of 1,607.47 miles, of which 1,063 miles are surfaced. The average expenditure per township was over $10,000 or $118 per mile of surfaced roads.

A number of townships effected gratifying improvements in bridge and culvert construction, the most notable structures being a 173-foot steel and concrete bridge at Maple Hill, in Brant Township and a 105-foot steel girder bridge in Culross. Huron Township built five bridges with spans varying from 20 to 50-foot.

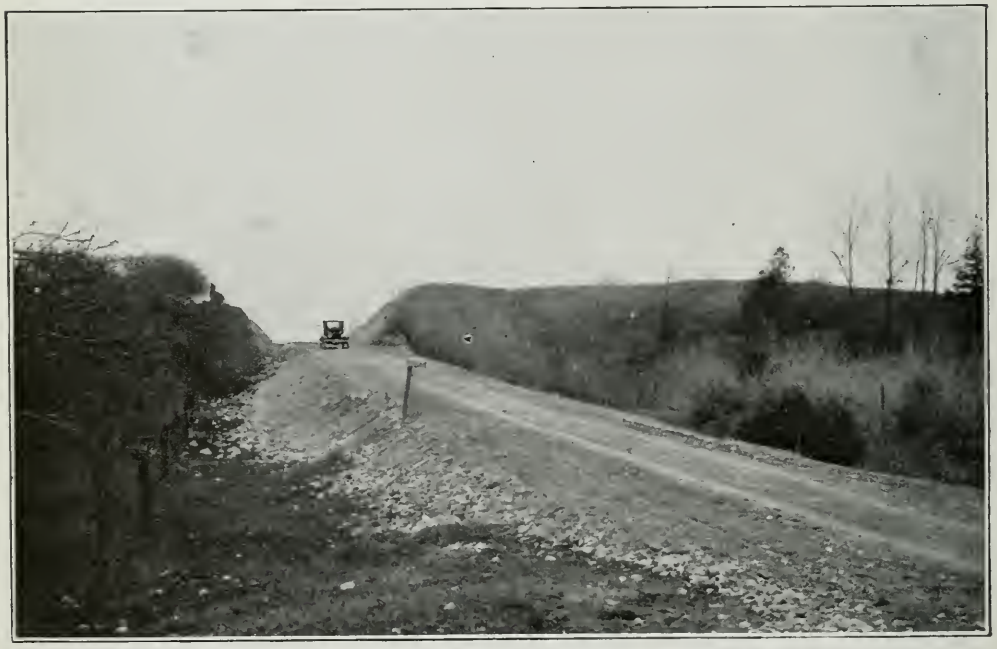
Of the twelve townships concerned, statute labour has been abolished in two, commuted in two and retained in eight. The average cost of loading, transporting and spreading gravel by statute labour (adjusted to $2.00 per day basis) was $1.15 per yard-mile in the townships involved. Under contract or day labour procedure this operation throughout the county averaged 46½ cents per yard-mile. Two townships had duly appointed road superintendents in charge of their work during the year.

HURON COUNTY

The system in Huron comprises 98 miles of Provincial County and 329 miles of County Road, the total, 427 miles, being 19.9 per cent. of the total road mileage within the county. In view of the extensive and rapidly increasing summer traffic along Lake Huron, the entire Lake Road from Grand Bend to Amberly (with the exception of that portion within the town of Goderich) was designated a Provincial County Road during the year.

Expenditure on Provincial County Road construction was small, amounting to $3,650, and involving an 8-foot reinforced concrete culvert in Morris, and 1¼ miles of crushed gravel construction in Stanley, both on Road No. 30. Maintenance on this class of road averaged $405 per mile, of which $302 was expended on resurfacing with crushed gravel. The completion of the Grand Bend Bridge and an 11-foot reinforced concrete bridge in Stanley, both on Road No. 117, totalled $5,200 for bridge construction on Provincial County Roads.

On County Roads 10½ miles of crushed gravel construction averaged $1,532 per mile including grading and drainage. A total expenditure on maintenance of $81,500 averaged $235 per mile including $181 for resurfacing. Grading and dragging of roads cost $29.50 per mile. Maintenance resurfacing comprised over 180 miles of a thin coat of material (mostly crushed) spread to the full width of the travelled road. Considering this, in conjunction with the low maintenance



Huron County Road
Grade reduction in Grey Township.

costs cited above, the effectiveness of timely maintenance, and the efficiency of a well-organized patrol system are revealed in the statements of road expenditure as clearly as they are evident to the users of the roads.

New machinery included eight light graders, six drags, eleven scrapers and fifteen gravel screens, a total expenditure of $2,250. Repairs were light at $1,788 considering the almost constant operations throughout the season of six crushing outfits.

Labour costs decreased during the season, the average being 25 cents per hour for man, 35 cents for foreman and 55 cents for man and team. Crushing cost 42 cents per cubic yard, concrete $11.00 per cubic yard including steel. The cost of engineering and supervision amounted to 2.8 per cent. of the total expenditure.

The town of Wingham paved with one-course concrete one-half mile of connecting link on Provincial County Road No. 30 at a cost of $2.83 per square yard including 1¼ miles of underdrain and considerable cut and fill.

Township Work

All townships, sixteen in number, took advantage of the Provincial subsidy provided by the Ontario Highways Act. On a total township road mileage of 1,670 miles the amount expended under the Act was $126,000. There are 1,313 miles of surfaced township roads.

Statute labour has been abolished in four townships and commuted in two. Eight townships had road superintendents. The application of gravel cost $1.30 per yard-mile by statute labour ($2.00 per day basis) and 42 cents per yard-mile by contract or day work on the average basis of 30 cents per hour for men and 60 cents for man with team.

OXFORD COUNTY

At the close of 1921, Oxford County Road System comprised 29.2 miles of Provincial County, and 251.3 miles of County Roads, amounting to 20.9 per cent. of the entire road mileage.

Provincial County Road improvement was almost entirely confined to maintenance, costing $23,974.61, or over $820 per mile. Of this, only $15.82 per mile was expended on grading and dragging.

County Road construction cost $74,245.48. This included nearly 13 miles of underdrains, varying from 4 inches to 18 inches in diameter. On Road No. 39 in North Norwich, 1¾ miles of bituminous penetration pavement was constructed on a 8-inch stone base, at a cost of $27,442.79, or $1.73 per square yard. About 16 miles of gravel road construction cost $36,118.41 or $2,257 per mile. Bridge construction consisted of a 44-foot steel and concrete structure on Road No. 31 in Dereham, costing $3,648.55, and a similar 44-foot span on Road No. 35 in South Norwich, which cost $3,857.25.

Maintenance costs on County Roads totalled $86,558.62, an average of $265 per mile, of which only $10.80 per mile was spent on grading and dragging. The lack of any form of patrol system is clearly indicated on the small use of the drag and grader. That this is quite the reverse of representing a saving to the county is shown in the relatively high costs of maintenance per mile.

New machinery included one large and twenty-five small graders and six scrapers, the expenditure being $5,830.71. Repairs and rentals totalled $8,264.79, involving chiefly the complete overhaul of four crushing plants and the rental of a number of tractors.

The towns of Tillsonburg and Norwich constructed bituminous surfaced roads on connecting links. The former accomplished the surfacing of 1¼ miles for $13,100.00 including culverts and underdrains.

Labour costs averaged 30 cents for men and 60 cents for teams per hour. Gravel haulage was reduced in cost to 40 cents per yard-mile (including loading and spreading) by the use of a motor truck. Concrete construction cost $8.00 per cubic yard, reinforcing supplied. Tractors were rented for $8.00 per day in many instances.

Engineering and supervision cost the county 1.2 per cent. of the total expenditure as compared with 1.9 per cent. in 1920 and 2.0 per cent. in 1919.

County Road management in Oxford is at a serious disadvantage, arising from the township organization that prevails. While machinery and general expenses are met by county funds, the expenditure on road and bridge construction and maintenance is a township, town or village matter. There is no road and bridge committee; the road superintendent and reeve of the municipality decide upon the extent and nature of the work that is to be done. There is no patrol system, consequently, although the expenditure on maintenance is high, the road surfaces are not given the attention warranted by the investment made therein. A heavy expenditure on reconstruction recurs every few years on nearly every road as a result of lack of maintenance supervision. These factors, together with an unequal distribution of gravel resources, indicate the economies that could be effected if a purely county system were adopted. This procedure cannot be too strongly emphasized.

Township Work

Of the eleven townships, five have abolished statute labour. Gravel, loaded, hauled and spread cost 41 cents per yard-mile when handled by contract or day labour, but averages $1.07

in the townships retaining statute labour. Of the 1,039.5 miles of township roads, 839.4 miles are gravelled and 6.1 miles surfaced with broken stone. All townships received benefit from the 20 per cent. subsidy and expended slightly over $133,000.

PERTH COUNTY

There are 33.6 miles of Provincial County Roads and 203.2 miles of County Roads in Perth. This mileage involves 17.5 per cent. of all the roads, and includes 0.5 miles of concrete, 3.2 miles of bituminous surface, 9.8 miles of stone, 217.2 miles of gravel and 6.1 miles of earth roads.

On Road No. 46 (Provincial County) a concrete pavement one-half mile in length was constructed through the village of Atwood in the township of Elma, the expenditure being $16,-531.15. The work was not done in accordance with the specifications stipulated by the Department, and portions of it failed before the close of the year. With the exception of 400 yards of crushed gravel construction in Moncton, the only other construction expenditure on Provincial County Roads was for underdraining.

The chief item of maintenance expenditure covered the resurfacing of several portions of Provincial County Road No. 46 with crushed gravel at a cost of $5,428.25. This work was not done in conformity with Provincial County Road standards and the subsidy allowed thereon was 40 per cent. of the cost. Out of a total maintenance expenditure on County Roads of $55,000.00, resurfacing cost $45,151.52, or an average of $222.20 per mile, and grading $23.44 per mile. County Road construction included 110 rods of waterbound macadam on a newly added portion of road from the G.T.R. station at Sebringville to the village at a cost of $800, the Department supplying the stone to compensate for the extra wear on the old road occasioned during the construction of a neighbouring portion of Provincial Highway. There was also one-half mile of crushed gravelling in the village of Dublin, and some 392 rods of underdrains in various localities. Bridge work involved three structures, the chief being a 60-foot span, steel and concrete, in Mornington (County Road No. 14) costing $5,655.50.

Too much emphasis cannot be placed upon the inadequacy of the County Road organization in Perth. Each township employs a foreman, or commissioner, who, under the direction of the reeve or township council, oversees the County Road work. Bills and accounts are sent to the County Road Superintendent, who charges them up to the roads concerned and passes them to the County Treasurer for payment. The County Road Superintendent is at the service of the townships for the preparation of bridge plans, estimates for drains, grades, etc., and acts generally in an advisory capacity as County Engineer. Apart from this, however, his duties are purely clerical, and the actual work of construction or maintenance has little or none of his personal superintendence. The most important duties pertaining to the office of County Road Superintendent are carried out by the reeves themselves.

Perth, as a county, owns no machinery. Each township, operating completely within itself as regards County Roads, buys machinery, and uses it irrespectively of the equipment or needs of adjoining townships, and generally on County and Township Roads alike. It is obvious that County Roads in one township suffer the lack of certain equipment that is often lying idle in a near-by township.

The condition of County Roads in Perth indicates the lack of a suitable system of management. The county suffers from an unequal distribution of road material, from an inadequate arrangement as regards road machinery and from the lack of a system of maintenance and patrols. During 1921, the total expenditure on dragging, an operation strongly urged by the Department in the interests of smooth surfaces, amounted to $3.80 according to the annual returns. The adoption of a purely county system of road management and finance would obviate most of these difficulties.

Township Work

Of 1,075 miles of township roads in Perth County, 829 miles have been gravelled and 33 miles surfaced with broken stone. The townships of Blanshard, Downie, Fullarton and Logan abolished statute labour some years ago and North Easthope commuted it this year. The application of gravel by statute labour methods averaged $1.01 per yard-mile in 1921 as against an average of 48 cents per yard-mile for contract or day labour work. All townships received the 20 per cent. aid, the total approved expenditure on township roads being $138,509.70, an average expenditure per mile of surfaced roads of approximately $160.00. The township of Elma constructed six bridges during the year, 82-feet being the longest span, the bridge expenditure being $13,882.00.

WATERLOO COUNTY

In Waterloo, with a total of 822 miles of all roads, 23.8 per cent. or 195.4 miles have been assumed as County Roads. There are 25.3 miles of Provincial County Roads, an additional 6.6 miles between Baden and Wellesley having been designated in 1921.

During the year the mileage of concrete roads in the system was increased to eight miles. There are 2.7 miles of stone, the remaining 184.7 being gravel roads.

On Provincial County Road No. 75, a total of 32,550 square yards of 7-inch concrete pavement 16-feet wide was laid by contract at $2.24 per square yard. This important thoroughfare between the towns of Waterloo and Elmira was further improved at St. Jacob's Hill, by straight-

ening and grade reduction. In addition, about 750 linear feet of concrete, 16 feet wide, was laid on County Road 29b through Floradale.

Arthur Street, Elmira, a connecting link on Road No. 75, was paved with asphaltic concrete at a cost of approximately $62,000 including grading.

The Kitchener Suburban Roads Commission laid 1.40 miles of concrete pavement in the vicinity of Bridgeport on County Road No. 10, at a cost of approximately $44,500. This pavement is 20 feet wide, and was laid by contract at a cost of $2.42 per square yard.

One new bridge, a 54-foot steel span with concrete abutments and floor, on County Road No. 25, and costing $7,600, was the only expenditure under this heading, except the completion of guard rails on several structures built in 1920.

About nine miles of gravel roads were constructed to standard section, the chief items being 6.5 miles on Road No. 7, south from Breslau and 2.5 miles on Road No. 19, the average cost per mile being $2,300. In all about $165,000 was expended upon construction.

Maintenance expenditure averaged $249.00 per mile. Labour costs averaged generally 30 cents per hour for man and 60 cents for teams. Slightly higher prices were paid, however, in the vicinity of Galt and Kitchener, where city prices had to be met. The general condition of gravel roads in Waterloo indicates the lack of a suitable system of patrolling the roads. Material is plentiful and of good quality, especially if crushed. The county council is considering the adoption of a straight county system of road management to facilitate the development of an adequate system of patrols.

Township Work

Approved expenditure on Township Roads in 1921 totalled $46,776.13. All townships received aid through the Ontario Highways Act. Gravelling, per yard-mile averaged $1.22 under Statute Labour and 49 cents per yard-mile by contract. These figures are conclusive of the advantage, in the interests of economy, of abolishing the old system of road work and particularly so in view of the proximity to the brisk industrial centres of Kitchener, Galt, Preston, Elmira and Hespeler, whose calls upon the labour market have constituted an argument against the abolition of statute labour.

TORONTO, June 21st, 1922.

W. A. McLEAN, ESQ.,
Deputy Minister of Highways, Ontario.

SIR:

I herewith submit a report on work carried out on County Roads during the year 1921, within the Counties of Dufferin, Grey, Halton, Simcoe and Wellington.

All of which is respectfully submitted,

H. A. LUMSDEN,
District Engineer of Municipal Roads.

COUNTY OF GREY

Though one of the last counties to come under the Highway Improvement Act, this county has made steady and great progress since adopting the system in 1918.

A policy was adopted of constructing either waterbound macadam, or gravel roads with all reasonable speed and they have adhered to this, with a result that up to the end of 1921, out of the 68 miles of Provincial County Roads, 36 miles have been built and it is confidently expected that by the end of 1922 not less than 50 miles will be completed; this includes Suburban Roads.

Three complete outfits were at work throughout the year on Provincial County Roads, with the result that 8 miles of macadam road, 18 feet wide, were built in addition to 37 culverts, at a cost of approximately $110,000, the somewhat high costs being necessitated by unusual construction difficulties in going through low-lying land, purchasing extra right-of-way, diversions, etc. Grades have been reduced to a maximum of 8 per cent. involving the cutting and straightening of two very steep hills at a cost of $32,808.75. In addition six bridges were built.

On County Roads the progress has necessarily been somewhat slower, but throughout the season one outfit was continuously at work between Rock Mills and Priceville, where 7 miles of gravel road was built at a cost of $41,839.80. Five bridges were also built on County Roads. The concentration of work on the most important roads has necessarily created some restlessness in townships where no work was in progress but with a little patience on their part the roads will be built, and a continuous and better system of roads will result.

As an instance of the great benefits to be derived, the 22 miles (Meaford to Owen Sound) could hardly be made in less than two hours with a car previous to construction, while now, though four miles yet remain to be built, the trip seldom takes more than an hour. In this con-

Grey County Road
18-foot concrete pavement—Provincial County Road, near Meaford.

nection it might be mentioned that the urgent need of regulations and control of bus services as to speed and load is very evident and already the roads are getting damaged through the fast travel of heavy motor vehicles in wet weather.

The maintenance of the roads has been for the most part fair, though in a few instances more might be done. The failure to use the drags at the right time or of the local overseer to be thoroughly interested in his work would account for most of the trouble where lack of maintenance is noticed.

Suburban Roads

This is the first year of operation by the Suburban Area Commission and $14,384.41 was spent on new machinery. Tney have taken hold of the work well, and during the year much was accomplished. One and a half miles of water bound macadam were built, a bad swamp filled in on the Shallow Lake road and considerable hill cutting and grading was done as well as maintenance. The mileage taken over, 44 miles, is altogether too great, ranking second only to Toronto.

Township Work

Of the sixteen townships all but Sarawak received aid under the Ontario Highways Act. Of these, two have abolished and two have commuted statute labour, and where this has been done the work is inclined to show an improvement over the work of other townships. Over $130,000 was expended on work by the sixteen townships. While considerable improvement has been made there remains much room for improvement. Better bridges should be built according to properly prepared plans and the roads should be widened and the drags used more frequently.

DUFFERIN COUNTY

While considerable work was done by this county during the year, the greatest work was more in organizing for the future than in immediate construction. During the year, the county, through the report of a special committee, decided to change from a Township to a strictly County Road System. This marks probably the greatest accomplishment for the year and provides every reason to hope that in the future better results will be obtained than in the past. During the year five bridges were built, one on Provincial County and four on County Roads, the largest being one of 50-foot span built at a cost of $5,875.00. No extensive road construction was undertaken during the year, construction expenses being confined to a little widening and filling of swamps, hill cutting and a number of culverts.

Township Work

All six townships retain statute labour, and under these conditions work cannot be carried on with much efficiency. A growing interest in highway work is, however, very noticeable. Road superintendents were appointed by Mulmur, Melancthon and East Luther.

HALTON COUNTY

In area this is the second smallest of all counties in Ontario, containing but 228,396 acres of assessed property. Its total assessment (1919), however, was $17,177,210, which ranks comparatively high despite the fact that the largest of its towns has only a population of 2,880.

This county first came in under the Highway Improvement Act in 1904, and has since endeavoured to improve all its County Roads. Where local material was available this has been accomplished, but some stretches yet remain to be built in the townships of Trafalgar and Esquesing. Unfortunately, as the life of a macadam road is very limited, a large number of roads built with aid from the Department already require reconstruction. Had a patrol system been in force since their construction many more years of life would have been got out of the roads.

There are 139 miles of road on the County Road System of which 130 miles are surfaced, consisting of 4.5 miles of cement concrete, 100.5 miles of waterbound macadam and 24 miles of gravel.

The outstanding feature of construction work in this county during 1921 was the laying of four miles of concrete pavement on Provincial County Road No. 71. The chief condition which influenced the county in building this type of road was the entire lack of material in the township of Trafalgar, necessitating a haul of from one to five miles from the nearest railway. The road was graded to a width of 28 feet, and the bridges widened. The pavement consists of one course concrete 5½ to 7 inches thick and 10 feet wide laid in the centre of the road, on each side of which is a three-foot shoulder of macadam. The concrete was poured in 50-foot sections except towards the north end where the sections were made 30 feet in length. No reinforcing was used. Exclusive of the bridges the cost of this work amounted to $23,650 per mile. The concrete was laid by contract, the unit price for the slab being $3.10 per square yard. So far, the road gives every indication of being satisfactory. It is the intention to consolidate and widen the shoulders this coming season.

Approximately seven and a half miles of waterbound macadam road were constructed at an average cost of $7,950 a mile. Several long stretches of road were stoned without rolling at a cost of $3,600 per mile. Four small bridges were built during the year. Eighty-five per cent. of the bridges on County Roads have now been built. The bridge work, however, cannot be said to be quite as good as in some other parts of the county, neither the finish nor the concrete itself being entirely satisfactory. The township system of carrying on County Road work is not in the best interest of the road system. The class of work is far from consistent, good and poor work being found close together. For instance, stone being put on the road unrolled is poor practice.

DUFFERIN COUNTY

Concrete truss bridge in township of East Garafraxa, consisting of two spans each 80 feet long.

Township Work

All four townships in this county are receiving grants from the Department and all have appointed road superintendents. Nelson is the only one, however, which seemed to be carrying out its work in accordance with the intention of the Act. The other three did not give their superintendent a sufficiently free hand or endeavour to keep him in touch with the work of the whole township. Statute labour doubtless accounts for much of this trouble, as only in Nelson has it been commuted.

A meeting held at Milton on January 11th, 1922, which was attended by the township road superintendents, reeves and deputy reeves, is worthy of note,. All subjects pertaining to township work were discussed and considerable interest was shown, and it is hoped that more uniformity of work may result.

The township of Nelson constructed approximately three-quarters of a mile of waterbound macadam and a similar length of gravel road during the year. One bridge 26-foot span was built by the township of Nassagaweya.

SIMCOE COUNTY

This county commenced operations under the Highway Improvement Act in 1903. It has an assessed area of nearly a million square miles and the designated road system has a length of 461 miles, exclusive of 53 miles of Provincial Highway. In this respect it ranks second of all the counties.

Constant maintenance and a certain amount of construction have effected a great improvement in the roads, but there remains much to be done. At the present time the designated roads (exclusive of Provincial Highways) are made up of the following types:

Earth Roads 20% Gravel 77% Stone 2% Other Types 1%

During the past year the county and townships suffered severely from heavy storms during April and May which carried away many bridges (mostly old) and left the roads in bad shape, particularly in the southern portion of the county.

The outstanding feature of county work in 1921 was the construction of six bridges on Provincial County Roads, the largest of which, Hamel's Bridge, near Beeton, has a span of 60 feet; this was commenced in 1920. Seven bridges were also built on County Roads, the largest being one at Elmvale of 30-foot span with 20-foot roadway, built at a cost of $4,934.32.

On road construction the only work calling for special mention is the tar penetration surface put on the road between Penetang and Midland at a cost of $7,000 per mile. Between Orillia and Atherly a macadam road was built 20 feet in width and the surface treated with tar. The work was well done. Considerable improvement was effected on the Penetang road, also on the big sand hill north of Barrie on the Elmvale road, while on the newly designated Provincial County Road, east of Singhampton, a road diversion has eliminated a most dangerous hill.

In the towns and villages probably the best work was done on the Lake Shore road in the town of Collingwood, where a gravel road was built and given a light coat of oil. In Barrie a good stretch of macadam road was built.

The roads were maintained throughout the season in fairly good shape.

Township Work

Of the sixteen townships in this county, eight are taking advantage of the 20 per cent. subsidy, the remainder receiving Colonization Roads Aid.

A number of permanent bridges were built, particularly by the township of West Gwillimbury, where seven bridges were constructed at a cost of a little over twelve thousand dollars. The work carried out in the township of Nottawasaga was most satisfactory. The townships of Tecumseh, Essa and Flos have abolished statute labour, and a similar tendency is noticeable among the other townships. Township road superintendents were appointed by Nottawasaga, Flos, Tecumseh, West Gwillimbury and Tossorontio.

WELLINGTON COUNTY

This county has been doing work under the Highway Improvement Act since 1903. Their policy in recent years has been to concentrate on the building of permanent structures, and during the year approximately forty thousand dollars was spent thereon. No extensive road construction was undertaken but several short stretches of road were graded to the standard width and gravelled. The maintenance has been well attended to, better than in many near-by counties, and particularly where the patrol system has been adopted excellent results have been obtained. The total designated mileage of road, including the 87 miles of Provincial Highways, show the following types:

Concrete, 4 miles; bituminous, 6 miles; stone, 13 miles; gravel, 367 miles; earth, 35 miles. The township roads also show over 45 per cent. of their road mileage to have been gravelled. It is estimated that 85 per cent. of the bridges and culverts on County and Provincial County

Bruce County Road

Construction of gravel road through a swampy country, on commencement of work and after completion.

Roads have now been constructed. The only unfavourable feature connected with the fourteen bridges built during the year is that the finish in several cases was very rough.

Township Work

The chief factor against the township doing effective and efficient work is that, with the exception of Guelph, all retain statute labour and only four out of twelve have appointed township road superintendents. Considerable work, however, was accomplished. Approximately $100,000 was spent by the twelve townships and grants totalling $19,348.49 were received from the Province. The township to accomplish most was West Garafraxa, which built four bridges costing almost $14,000 (one of which is not yet completed). Altogether 24 bridges were built by seven townships, the aggregate cost being about $42,000.

The condition of the township roads varied from a first-rate gravel road to an almost impassable mud track, and while a certain amount of improvement is taking place no decided benefits can be expected till the statute labour system is abolished.

TORONTO, April 15th, 1922.

W. A. MCLEAN, ESQ.,
Deputy Minister of Highways, Ontario.

SIR:

I have the honour to submit a summary report of the road work carried out under the Highway Improvement Act and the Ontario Highways Act during 1921 in the counties of Brant, Haldimand, Lincoln, Norfolk, Welland and Wentworth.

These counties all showed considerable increase in their road building programme during 1921, as is borne out by the fact that their combined expenditure for road purposes was in excess of two million dollars, exclusive of what they contributed to Provincial Highway construction and what the townships spent individually on their township roads.

From observations of previous years' work, a general improvement in the standard of work is noticeable, and more systematic maintenance is being undertaken.

Several townships were added to those taking aid from the Department, and in those where statute labour is abolished a very marked improvement is seen in the standard of their work. The officials also report that much more is being accomplished per dollar expended than under the old system. Many townships now have their work under the supervision of a township superintendent.

Respectfully submitted,

J. H. HAWES,
District Engineer of Municipal Roads.

BRANT COUNTY

The expenditure on the county road system in Brant during 1921 exceeded by a considerable amount that of any preceding year since the county adopted the system. This was partly due to the purchase by the county of the Brantford-Oakland Toll Road and the immediate undertaking of a considerable expenditure thereon. The purchase price was $23,000. The road was later designated a Provincial County Road and assumed by the Brantford Suburban Roads Commission.

The County Road System at present consists of approximately one hundred and two miles of road of which 78 miles are gravel, 2½ miles concrete, 2 miles tar penetration, and 19½ miles earth. The total mileage of roads of all classes in the county is approximately 620 miles, and of this, 300 miles have a metalled surface of some kind, 270 miles of which is gravel.

BRANTFORD SUBURBAN ROADS

There are nineteen miles of road under the jurisdiction of the Brantford Suburban Roads Commission. The largest item of construction during the past summer consisted of the improvement of about two miles on the Burford Road beginning at the railway crossing just west of the city. A thirty-foot grade was established throughout, with adequate drainage. Some slight changes in alignment were made with a view to eliminating or improving the curvature and improving the visibility. For this purpose, it was necessary at a few points to acquire some additional right-of-way. A concrete pavement 9 feet wide and 8,625 feet long was laid on the north side of the road. The pavement is 7 inches thick and was laid by day labour at a cost of $2.93 per square yard. A 9-foot strip of gravel was put down alongside the concrete on the south side of the road. This arrangement was somewhat in the nature of an experiment, the contention being that the concrete would carry probably 90 per cent. of the traffic, the gravel being called upon to take care of the turn-out traffic. Observation during 1922 will no

doubt prove whether this scheme should be adopted or not, and if it works out as anticipated, it will enable the county to provide twice the mileage of concrete pavement.

On the Cockshutt Road it is proposed to replace the existing wooden trestles with concrete box culverts and earth fills. The culverts are completed and the first fill, consisting of about 12,000 cubic yards, is almost completed. The northern approach to the Grand River bridge was strengthened, and a new wooden floor with a tar surface put on.

Provincial County Roads

One-half mile of heavy grading was done just east of Burford Village. The grade was raised an average of two feet and widened to 28 feet. Seven-eighths of a mile of twenty-eight-foot grade was established in the township of Oakland, and one mile of similar grade in the township of Dumfries across lots 10, 11 and 12, on Road No. 103. These grades are good examples of Provincial County Road work.

County Roads

Approximately four and one-half miles of road were graded to the standard width on various county roads, with side ditches and entrance culverts complete. In addition to the mentioned work, approximately 4½ miles of tile drain and 40 pipe culverts were laid.

Bridges

One bridge was built during the year in the township of Oakland at the south end of the Cockshutt road. This is of reinforced concrete, 12-foot span, and 20-foot roadway. Owing to the nature of the soil, 16-foot tamarack piles were used to support the bridge.

Maintenance

The chief items of expenditure for maintenance were for gravelling and dragging; $24,176.39 was spent on resurfacing county roads, and $3,185.32 on dragging. On the gravel roads, a tractor and grader were used for dragging operations, and these roads were kept in splendid condition during the season.

Machinery

This county had quite a large outlay for new machinery during the year, the chief units being: three stone crushers, one 3½-ton motor truck, one 12-ton road roller, one waggon loader, one concrete mixer and one steam shovel. A suitable house has been erected for the storing of machinery during the winter months.

Township Work

Of the townships in Brant County, one has abolished statute labour, two have commuted it, and two are on a statute labour basis. The township of Burford was the most active of any in the county with an expenditure of approximately $22,000.00. Some very good work was accomplished under Mr. F. W. Lewis, the superintendent. Work in the remaining townships consisted of the replacing and repairing of culverts, grading and gravelling of short stretches of road.

HALDIMAND COUNTY

No extensive programme of construction was undertaken in Haldimand County during 1921. Over 40 miles of the county system were graded and ditched to the county road standard, in preparation for a surface of some sort in the future. The extensive grading work done this year should prove to be a decided improvement to the system. The alignment of the grade in many instances was greatly improved, as was the drainage in all cases.

The road from Hagersville to Selkirk, a distance of 10½ miles, was resurfaced with crushed stone and is at present in splendid condition. A similar surface was put on Road No. 10, from Nelles' Corners to its junction with Road No. 7, a distance of about one mile. Several smaller jobs of resurfacing were done on various macadam roads, particularly on the Rainham road, the river road between Cayuga and Caledonia, the road leading eastward from York village and the Nanticoke Road. An expenditure of approximately $3,700.00 was made on the dragging of earth and gravel roads, which were kept in comparatively good condition.

A grant of $5,500.00 was made to the village of Hagersville for a bituminous surface on the main street, a connecting link of the County Road system.

No bridges were built during the year, but 207 pipe and tile culverts were put in throughout the system, and two concrete box culverts were constructed. Many others were lengthened to conform to the new grades.

The detour traffic from the Provincial Highway which was under construction through the county caused a heavy strain on some of the county roads and made the maintenance charges rather high on those roads.

Township Work

All the townships in the county except Rainham, Dunn and Sherbrooke took advantage of the 20 per cent. grant from the Province this year. Of the ten townships, four have abolished statute labour, one commuted, and five still retain statute labour. In most of the town-

ships a decided interest is being taken in their roads and for the most part conscientious work is being done. The townships of Oneida, Seneca, and Walpole had township road superintendents in charge of their work, and appeared well satisfied with the results.

LINCOLN COUNTY

The county road system of Lincoln at present consists of approximately 175 miles, of which approximately 100 miles have received a surface of some sort, chiefly of waterbound or tar macadam. A limited supply of gravel is obtained along the southern shore of Lake Ontario and a few miles of road have had a surface of gravel. The clay roads are in excellent condition, being constantly dragged. At the end of 1921 there were 14 miles of gravel roads, 58 miles of waterbound macadam, 22 miles of bituminous penetration, and 4½ miles of concrete roads completed on the system.

ST. CATHARINES SUBURBAN ROADS

The suburban roads are under the supervision of Mr. W. P. Near, and the season's work consisted of 2.0 miles of concrete road, 18-foot wide, on Niagara street, and 1,800 feet of 9-foot concrete pavement on the mountain section of the Merrittville road. One-half mile of asphaltic concrete was also laid on Niagara street, connecting with the city pavement. A 20-foot span reinforced concrete bridge was built on the Martindale road over Martindale pond, with a clear width of roadway of twenty feet.

County Roads

On the country roads, 3 miles of tar macadam were built, 16 feet wide. Sixteen miles of waterbound macadam 10 feet wide were built in various parts of the county, and 3 miles of gravel were built on the lake shore road between Port Dalhousie and Niagara-on-the-Lake. Three bridges were built, one 12-foot span on Lot 1, Concession 1, Grantham; one 28-foot span on the Creek Road; and one 54-foot span over the Four-Mile Creek on the lake shore road, the expenditure on the three bridges being $11,446.65. The average cost for penetration roads was approximately $19,500.00 per mile for a 16-foot road. The work done by day labour was approximately $500.00 per mile cheaper than that done by contract. The average cost for the 10-foot waterbound macadam, including grading and ditching, was $8,560.00 per mile.

Maintenance

A well organized patrol system is in operation in this county. On the twenty miles of bituminous roads in the system, one gang consisting of three men, a team and light waggon, a tar kettle and the necessary tools, are engaged in keeping these roads in repair. The foremen of the various divisions throughout the county are furnished with stamped and addressed envelopes, one of which they mail to the superintendent weekly, with a brief report of work done, and asking for any supplies required or calling to his notice any matter which needs his personal attention.

Township Work

Every township in this county has abolished statute labour, and the work in all except the township of Niagara is under the direction of a road superintendent. Generally speaking, the work is above the average standard for the district, probably due to the fact that they have been working longer under the present system than those in other localities. The townships bordering on Lake Ontario have a problem in the protecting of the bank of the lake front road and are undertaking to protect it by running short jetties out into the lake. Where the experiment has been tried the results have been very gratifying, erosion being practically eliminated.

NORFOLK COUNTY

A total of $435,800.20 was spent on the Norfolk County Road System in 1921, as compared with $174,696.35 in 1920, which is an indication of the increased activity in road work in this county during the past year. The total for construction was $165,159.32, and for maintenance $140,288.73.

Provincial County Roads

The chief item of construction was the completion of the 18-foot penetration road between the town of Simcoe and the village of Port Dover, a stretch of approximately 3½ miles. This gives a continuous hard surface between these two municipalities. Approximately $8,500.00 was spent on the maintenance of provincial county roads, chiefly on grading and resurfacing.

County Roads

Approximately nine miles of road were graded 24 feet between the shoulders, and 7 miles of this received a metalled surface. From Vanessa Station on the T., H. & B., westerly and southerly, four miles of gravel 14 feet wide and 12 inches deep, was laid. The gravel for this was

crushed, screened, rolled and watered, as for waterbound macadam. On County Road No. 9, running westerly from Port Rowan, 1½ miles of tar penetration road was built, and on Road No. 8, 0.85 miles of stone base, 6 inches consolidated, was laid in preparation for a tar penetration surface.

Bridges

The bridge expenditure for the year was exceptionally heavy, chiefly by reason of the expensive type of bridge which the county was called upon to build over the River Lynn at Port Dover. A 55-foot bascule bridge was built here, with a 16-foot roadway and a 6-foot sidewalk. The counter weight and mechanism for lifting the bridge are encased in the east abutment, making a very neat design for this type of bridge. The total cost was $77,344.66. A seventy-six-foot steel bridge with a 16-foot roadway, with concrete floor and abutments, known as the Dowell bridge, was built over Big Creek, the total cost being $17,763.00. A smaller bridge of reinforced concrete, 10-foot span, known as the Ronsom bridge, was built on Road No. 8, at a cost of $1,154,00.

Machinery

The total cost of machinery purchased during 1921 was $24,784.20. The larger items included five graders, two motor trucks and one gasoline shovel.

Township Work

With the exception of the township of Townsend, the townships in Norfolk County are not showing the interest in their roads that is generally in evidence throughout the district. This township abolished statute labour at the spring session of the council and appointed a township superintendent. Approximately 35 miles of grading of a good standard for township work was completed, and many culverts lengthened or replaced to conform to the new grades. For its first season under the new system this township made an excellent showing. In the remaining townships, the work was confined to the ordinary statute labour assessed on the ratepayers, along with the special work such as the building of a few bridges and culverts.

WELLAND COUNTY

As in most of the counties in this district, the road programme for 1921 was the largest in the history of the county, the total expenditure for the year being $475,803.23. Approximately 17.5 miles of roads were added to the county system during the year, making the county road mileage 136 miles, exclusive of 5 miles of Welland suburban roads, and 5¼ miles of Niagara Falls suburban roads. Of the 136 miles of county roads, 2 miles are gravel, 80 miles are macadam, 0.5 miles concrete, 8.5 miles bituminous macadam, and 45.0 miles earth. From this it will be seen that 67 per cent. of the county roads have been surfaced. Of the 34 miles of provincial county roads, 28 miles are surfaced.

Provincial County Roads

On the Garrison Road between Fort Erie and the road leading into Ridgeway, 5.93 miles of tar penetration road 16 feet wide was completed. The contract price for the last 2.7 miles completed in 1921 was $18,000.00 per mile, including grading and ditching. On the same road 6.8 miles of waterbound macadam was completed between Port Colborne and Marshville. This was built 16 feet wide and 9 inches deep consolidated.

County Roads

On the county roads, 2.6 miles of tar penetration road were built 16 feet wide. This is the Niagara Falls-Thorold road, from the end of Niagara Falls suburban road to the Thorold townline. Approximately 16.6 miles of waterbound macadam were built, 9 feet wide and 9 inches in depth, consolidated. Two miles of gravel road, 8 inches in depth, were laid in Pelham township. The total length of county road graded during the season was approximately 21 miles. A total of $30,897.52 was appropriated in special grants to towns and villages for the improvement of streets forming connecting links or extensions to the county system. General maintenance was carried out throughout the system, the sum of $58,793.26 being spent in the resurfacing of macadam roads, and $8,000.00 on minor repairs. The main item of expenditure for equipment was the installation of electrical power in the Bethel quarry at a cost of $2,500.00. This equipment has proved a splendid investment both as to efficiency and economy.

Welland and Niagara Falls Suburban Roads

On the suburban roads of Welland and Niagara Falls a total of $36,039.25 was expended on construction and maintenance during the season, the chief item being the construction of 1.3 miles of tar penetration road, 16 feet wide, on the Thorold stone road for the Niagara Falls Suburban Roads Commission.

Township Work

The townships in Welland County have shown a marked improvement in their road systems, and in most cases are working up an efficient township road organization. All except one township are working under the supervision of a township road superintendent.

WENTWORTH COUNTY

In December, 1921, the county system in Wentworth consisted of 157 miles of County Roads and 37 miles of Provincial County Roads. The total road mileage in the county is approximately 620 miles, of which about 31 per cent. comes under the jurisdiction of the county. Only one mile of road was added to the system during the year. Of the total of 620 miles, about 44 per cent. of the roads have a hard surface and consist of gravel or waterbound macadam.

Out of an expenditure of $252,942.92 during the season of 1921, only $19,037.34 was expended on the construction of new roads, and $5,063.22 on bridges and culverts. The total expenditure for maintenance and repair amounted to $203,616.79. An analysis of these figures indicates an abnormally high maintenance charge, and in the opinion of the writer is a convincing argument in favour of some more permanent form of construction in this county, which, owing to its location at the head of Lake Ontario, is subjected to a converging traffic, with the city of Hamilton forming the centre. In order to cut down this excessive maintenance cost, a serious attempt should be made to place some form of pavement on the more heavily travelled roads radiating from Hamilton. It should be remembered, of course, that owing to the extensive programme of construction on the Hamilton entrances of the provincial highways, the other roads have been subjected to an abnormal detour traffic, from which they will be to a large extent relieved on the completion of the Provincial Highway. The only work of a permanent nature done by the county during the season was the construction of several concrete culverts ranging in span from 2 to 10 feet. The largest item of expenditure for maintenance was on the Hamilton Suburban Road between Stoney Creek and Hamilton, on which approximately $32,000 was spent on resurfacing with crushed stone. The average per mile for maintenance of suburban roads was $1,908.45. The expenditure on new machinery during the year was $17,773.78, the more important purchases being a new 10-ton roller and a crusher and two bins and screens.

Township Work

The townships, with the exception of Glanford, all received Government aid on work done during the season, and on the whole did very creditable work, especially East Flamboro, Barton and Saltfleet. Their proximity to the city of Hamilton kept labour prices somewhat above the average in these townships, making the work considerably more expensive than in outlying districts. Four townships have abolished statute labour, one has commuted it and one partly commuted, while two townships are still operating under the statute labour system.

TORONTO, April 18th, 1922.

W. A. MACLEAN, ESQ.,
Deputy Minister of Highways, Ontario.

SIR:

I have the honour to submit a summary report on the improvement of the county roads during the year 1921 in District No. 7, which includes the counties of Hastings, Lennox and Addington, Frontenac, Leeds and Grenville, and Lanark, according to the provisions of the Highway Improvement Act.

During the year, in addition to the regular inspection, special visits were made at the request of the superintendents and county councils, and the advice and assistance of the Department was appreciated.

The cost of labour was greatly reduced and men were more plentiful than during the preceding years. More work of a better quality was obtained for the same outlay.

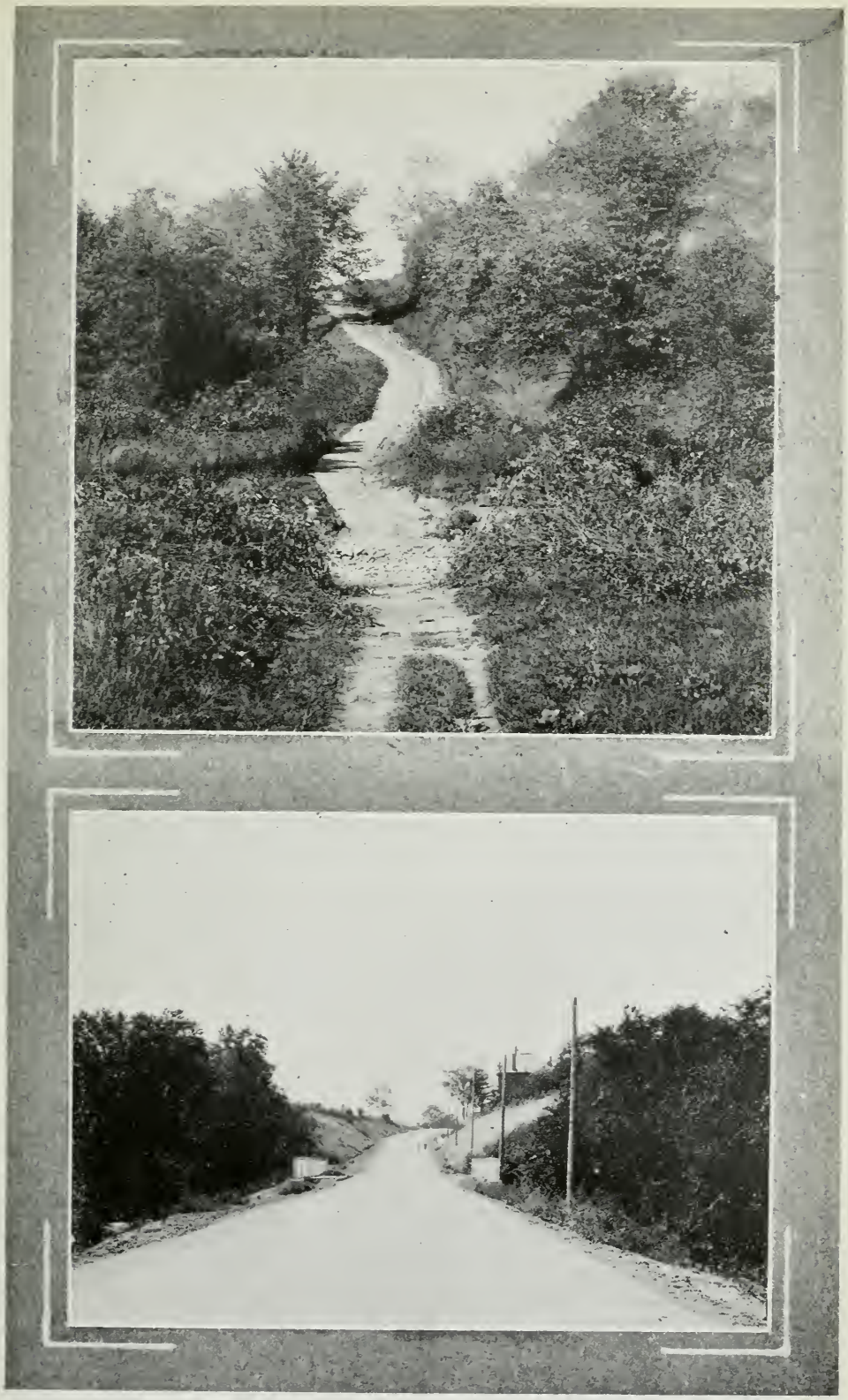
Waterbound macadam is the type of road most generally constructed in this district. The long dry spell during the early summer affected the usual convenient water supply, making good consolidation very difficult.

Respectfully submitted,

J. M. MCINNES,
District Engineer of Municipal Roads.

HASTINGS COUNTY

The sum of $71,501.63 was expended on Provincial County Roads, $19,150.22 of this amount being spent on construction. In many cases the maintenance consisted in shaping the road with a grader, surfacing with crushed rock and consolidating with a roller. Provincial County Roads No. 22 and No. 87 pass through some very rough and rocky country, making construction both difficult and expensive. A great deal of narrow right-of-way is encountered, and until the necessary width is acquired and the fences and telephone poles moved, it will be impossible to build these roads to the required standard. That part of Road No. 22 from Bannockburn north to Bancroft is particularly rough and hilly. During the season $29,553.40 was expended on this piece of road. The work consisted of securing better grades, widening cuts and fills,



HAMILTON-QUEENSTON PROVINCIAL HIGHWAY
Views of the road across Red Hill Creek, Saltfleet Township, before commencement and after completion of pavement.

and surfacing with crushed rock or gravel. The method being followed is to pick out the difficult and dangerous points on the road and work on them. Steep grades, sharp turns and narrow rock cuts are quite common, many of which are being improved. This road should be carefully surveyed, so that the right location will be assured. It is expected that the traffic, particularly the summer tourist traffic, will increase as this road is improved. On Road No. 87 gravel is obtainable in several sections. Nine miles of Provincial County Road were graded.

On County Road construction $40,363.05 were expended. This includes $20,178.02 expended on four reinforced concrete bridges, and a retaining wall 65 feet long of reinforced concrete in the village of Stirling. Two bridges consisting of two 30-foot spans, 16-foot roadways, at a cost of $10,931.40; one bridge of 40-foot span, 16-foot clear roadway, costing $3,585.60; and one bridge of 30-foot span, 16-foot roadway, of reinforced concrete, at a cost of $3,355.33 were built. Some 5¾ miles of road were graded and surfaced. The County Road between Cannifton and Corbyville was constructed of waterbound macadam 18 feet wide and the surface treated with oil. Approximately $61,453.00 were expended on maintenance and repair of county roads, which consisted mostly in surfacing with gravel or crushed rock. Ditching, replacing and repairing culverts, dragging and patrol work were generally carried out. New machinery to the amount of $23,134.48 was purchased, which included one complete crushing outfit, two rollers, one tractor and one grader.

Township Work

Four townships took advantage of the 20 per cent. grant. The work consisted mostly of surfacing with crushed rock or gravel. The township of Sidney built two reinforced concrete and steel bridges, one 20-foot span, one 25-foot span of 16-foot clear roadways. The township of Rawdon built three reinforced concrete bridges, one 20-foot span, one 30-foot span, and one 16-foot span, with 16-foot clear roadways. The township of Tyendinaga purchased a complete crushing outfit.

COUNTY OF LENNOX AND ADDINGTON

On the construction and maintenance of Provincial County Roads $34,491.24 was expended. The outstanding feature of this work was the construction of a mile of road on Road No. 54 in South Fredericksburg. Extra right-of-way to give the required 66 feet was purchased, fences, telephone and telegraph lines were moved. The roadway was well graded and ample provision for drainage was made. The road is waterbound macadam, 16 feet wide and 10 inches deep. On Road No. 25 in the township of Richmond, 2½ miles were ditched and surfaced with crushed limestone which was not rolled. The maintenance consisted mostly in resurfacing with gravel or crushed stone. In several instances the crushed stone was watered and consolidated with rollers.

Approximately $57,142.38 were expended on construction and maintenance of County Roads. In the township of Camden East, between Colebrook and Moscow, 3 miles were constructed at a cost of $3,017.00. This was fairly well ditched and finished with the aid of a roller. The maintenance consisted mostly in resurfacing with gravel or crushed rock. The latter in many places was watered and rolled. One small reinforced concrete arch and one bridge of 50-foot span were constructed. The steel for the latter was originally used at Kayler's bridge on the Provincial Highway, and was given gratis to the county.

The narrow right-of-way, with poles carrying power, telephone or telegraph lines in the way of construction is quite common and is a hindrance to work being carried out in accordance with the regulations.

Township Work

Four townships took advantage of the twenty per cent. grant, the work consisting for the most part of resurfacing with gravel or crushed rock. The township of Camden built one bridge, 20-foot span, 16-foot roadway, of reinforced concrete and steel.

FRONTENAC COUNTY

The work on the Provincial County Roads was confined to maintenance, consisting mostly of surfacing with crushed rock. A heavy grader drawn by a tractor and followed with a roller was used to repair macadam roads that had become rutted. In places where there was not enough material to make the crown of the road smooth, extra crushed rock was used. This appears to be an economic method in keeping a smooth surface. One reinforced concrete culvert was built and several narrow cuts and fills were widened.

On County Road work approximately $55,986 were expended. This was divided between construction and maintenance. The construction consisted in widening cuts and fills, shaping the roads with a grader, and surfacing with crushed rock. Four reinforced concrete culverts were built, and numerous tile culverts were laid. The maintenance consisted in surfacing with crushed rock or gravel, and shaping the road with a grader, and followed with a roller. Where necessary, several culverts were lengthened or repaired.

Township Work

Three townships took advantage of the 20 per cent. grant, the work consisting mostly of surfacing with crushed rock.

UNITED COUNTIES OF LEEDS AND GRENVILLE

On the construction and maintenance of Provincial County Roads $35,997.75 were expended. Provincial County Road No. 128 from Lombardy to Rideau Ferry was fairly well graded and partly surfaced with crushed rock and consolidated with the roller. This was rather a difficult road to construct. It was narrow, crooked, and several stretches of rock were encountered. The required right-of-way was obtained, and where rock was taken out, the material was crushed and used for surfacing. The road was straightened in many places. The work is to be completed in 1922. The work on Provincial County Road No. 129, running north from Brockville, consisted mostly in surfacing with crushed rock. Two reinforced concrete culverts were built, and one large corrugated iron pipe with end walls of concrete was put in.

On County Road work approximately $260,000.00 were expended. Some very good grading was done, the drainage getting proper consideration. In all some $160,000.00 were expended on road construction. Two bridges commenced last year were completed in 1921. Three new reinforced concrete bridges of 12, 14 and 16-foot spans and 24-foot clear roadways were constructed. Some $28,500.00 were expended on new machinery, consisting of three water waggons, two rollers, one crusher, one steam tractor, one twenty-ton screen and bin, four spreader waggons, one scarifier, four small graders, eleven scrapers, and four drags.

The maintenance and repair consisted mostly in surfacing with crushed rock, and rolling. Some places where the road was badly rutted the scarifier was used and the road shaped with a grader, and rolled.

Township Work

Nine townships took advantage of the 20 per cent. grant, the work consisting mostly in maintaining the roads with crushed rock or gravel.

LANARK COUNTY

The continuation of the construction of Provincial County Road No. 83, known as the Perth-Lanark Road, was the outstanding feature, this road being completed to the village of Balderson. The grading of this road was well done. The grade at Stanley hill was reduced and the material from the resulting cut was hauled both ways to widen the roadway, and 1,000 feet of tile were laid to take care of ground water. In this particular cut and in other places that were of a springy nature, excavations were made, then filled with large stones, and blind stone drains led from these to a free outlet. Two 4′ x 6′ x 28′ reinforced concrete culverts were built. Fifteen concrete or corrugated iron pipe culverts varying from 12 to 24 inches in diameter were laid. The road consists of a 3-inch tar penetration surface 16 feet wide, laid on a 8-inch consolidated stone base. Two and one-quarter miles were constructed at a cost of $39,231.44 or $17,436.00 per mile. Fourteen and one-half miles of County Road were constructed at an average cost of $3,750.10 per mile. This work consisted mostly of shaping the road with a grader and surfacing with crushed rock. Rock cuts were widened and the material where suitable was used for surfacing, or for widening fills. The Wymess cutoff on County Road No. 3, Bathurst Township, was completed. A 40-foot span bridge of reinforced concrete and steel was constructed at Maberly. On a part of the road between Carleton Place and Almonte, on Road No. 28, a base course was constructed with a view of laying a 3-inch tar penetration surface in the near future. $32,225.37 were expended on maintenance and repair of County Roads, which consisted mostly of resurfacing with crushed stone. A three-ton motor truck was purchased.

Township Work

Eight of the 24 townships took advantage of the 20 per cent. grant, work consisting mostly of maintenance by resurfacing with crushed rock. The township of Bathurst constructed a 30-foot span bridge, 16-foot clear roadway, of reinforced concrete and steel, over a branch of the Tay River.

MOTOR VEHICLES BRANCH

REPORT OF REGISTRAR OF MOTOR VEHICLES

W. A. McLean, Esq.,
Deputy Minister of Highways, Ontario.

Sir,—I have the honour to submit the following statistics of the permits and licenses issued by the Motor Vehicles Branch during the year 1920.

These statistics show in detail the number of passenger cars, commercial vehicles, motor-cycles and chauffeurs located in each city and county, as well as the occupations of the owners and the horse-power, carrying capacity and other descriptions of the vehicles registered.

Respectfully submitted,

J. P. Bickell,
Registrar of Motor Vehicles.

PASSENGER CARS REGISTERED

(According to Counties and Cities.)

Counties.		Cities.		Total.
Algoma	765	Sault Ste. Marie	1,040	1,805
Brant	1,571	Brantford	1,546	3,117
Bruce	3,398	....	....	3,398
Carleton	1,755	Ottawa	4,137	5,892
Dufferin	1,523	....	....	1,523
Dundas	1,321	....	....	1,321
Durham	1,611	....	....	1,611
Elgin	3,223	St. Thomas	1,101	4,324
Essex	5,721	Windsor	3,153	8,874
Frontenac	1,291	Kingston	1,106	2,397
Glengarry	605	....	....	605
Grenville	714	....	....	714
Grey	3,440	Owen Sound	640	4,080
Haldimand	2,225	....	....	2,225
Haliburton	160	....	....	160
Halton	2,037	....	....	2,037
Hastings	3,160	Belleville	765	3,925
Huron	4,008	....	....	4,008
Kenora	96	....	....	96
Kent	5,655	Chatham	1,337	6,992
Lambton	3,395	Sarnia	997	4,392
Lanark	1,837	....	....	1,837
Leeds	2,333	....	....	2,333
Lennox & Addington	1,450	....	....	1,450
Lincoln	1,884	St. Catharines	1,158	3,042
Manitoulin	574	....	....	574
Middlesex	4,570	London	3,696	8,266
Muskoka	611	....	....	611
Nipissing	758	....	....	758
Norfolk	2,133	....	....	2,133
Northumberland	2,376	....	....	2,376
Ontario	3,101	....	....	3,101
Oxford	3,828	Woodstock	601	4,429
Parry Sound	671	....	....	671
Peel	2,030	....	....	2,030
Perth	2,897	Stratford	909	3,806
Peterboro	1,479	Peterboro	1,158	2,637
Prescott	816	....	....	816
Prince Edward	1,520	....	....	1,520
Rainy River	494	....	....	494
Renfrew	1,989	....	....	1,989
Russell	526	....	....	526
Simcoe	5,151	....	....	5,151
Stormont	1,424	....	....	1,424
Sudbury	1,067	....	....	1,067
Thunder Bay	221	Fort William	845	
		Port Arthur	579	1,645
Temiskaming	684	....	....	684
Victoria	2,048	....	....	2,048

Counties.		Cities.		Total.
Waterloo	3,116	Galt	759	
		Kitchener	1,393	5,268
Welland	2,964	Niagara Falls	1,226	
		Welland	825	5,015
Wellington	2,811	Guelph	976	3,787
Wentworth	2,573	Hamilton	6,662	9,235
York	5,404	Toronto	32,063	37,467
Foreign	....	....	....	292
	113,014		68,672	181,978

PASSENGER CARS REGISTERED ACCORDING TO OCCUPATIONS

Farmers	64,045
Merchants	16,700
Tradesmen	23,680
Professional	6,748
Manufacturers	4,820
Doctors	3,934
Livery and garages	5,187
Commercial travellers	5,311
Firms	2,623
Real estate agents	1,098
Cartage agents	532
Insurance agents	1,190
Agents	5,408
Contractors	2,961
Undertakers	406
Clerks	3,969
Laborers	4,059
Managers	8,018
Police	303
Drovers	651
Soldiers	114
Unoccupied	11,369
Unclassified	7,985
Municipal corporations	212
Public Utilities Commission	130
Banks	142
Railways	17
Dominion Government	155
Ontario Government	204
Hospitals	7
	181,978

PASSENGER CARS REGISTERED ACCORDING TO POWER

Horse Power

Fords, 22.5	88,150	
15	154	
16–20	24,895	
21–25	43,993	
26–30	20,164	
31–35	2,394	
36–40	1,550	
41–45	382	
46–50	154	
51 up	16	
Electric	126	
		181,978

Motive Power

Gasoline	181,850	
Electric	126	
Steam	2	
		181,978

Registrations

Originals	28,513	
Renewals	153,465	
		181,978

Classifications of Models

Touring cars	154,652	
Runabouts	11,293	
Coupes	6,887	
Sedans	9,030	
Taxicabs	86	
Busses	30	
		181,978

COMMERCIAL CARS REGISTERED

Counties.		Cities.		Total.
Algoma	70	Sault Ste. Marie	149	219
Brant	112	Brantford	284	396
Bruce	95	....	....	95
Carleton	82	Ottawa	705	787
Dufferin	32	....	....	32
Dundas	42	....	....	42
Durham	51	....	....	51
Elgin	88	St. Thomas	124	212
Essex	559	Windsor	616	1,175
Frontenac	67	Kingston	129	196
Glengarry	17	....	....	17
Grenville	44	....	....	44
Grey	78	Owen Sound	76	154
Haldimand	116	....	....	116
Haliburton	10	....	....	10
Halton	244	....	....	244
Hastings	127	Belleville	122	249
Huron	149	....	....	149
Kenora	28	....	....	28
Kent	181	Chatham	194	375
Lambton	63	Sarnia	136	199
Lanark	88	....	....	88
Leeds	193	....	....	193
Lennox and Addington	69	....	....	69
Lincoln	310	St. Catharines	297	607
Manitoulin	1	....	....	1
Middlesex	198	London	679	877
Muskoka	40	....	....	40
Nipissing	103	....	....	103
Norfolk	122	....	....	122
Northumberland	154	....	....	154
Ontario	245	....	....	245
Oxford	175	Woodstock	88	263
Parry Sound	34	....	....	34
Peel	239	....	....	239
Perth	104	Stratford	102	206
Peterboro	59	Peterboro	145	204
Prescott	33	....	....	33
Prince Edward	93	....	....	93
Rainy River	34	....	....	34
Renfrew	84	....	....	84
Russell	25	....	....	25
Simcoe	292	....	....	292
Stormont	52	....	....	52
Sudbury	22	....	....	22
Thunder Bay	28	Fort William	162	
		Port Arthur	101	291
Temiskaming	70	....	....	70
Victoria	112	....	....	112
Waterloo	191	Galt	116	
		Kitchener	199	506
Welland	323	Niagara Falls	201	
		Welland	95	619
Wellington	66	Guelph	118	184
Wentworth	334	Hamilton	1,126	1,460
York	813	Toronto	6,187	7,000
Foreign	....	....	....	442
	6,961		12,151	19,554

COMMERCIAL CARS ACCORDING TO OCCUPATIONS

Farmers	1,859	
Merchants	4,924	
Tradesmen	1,108	
Professional	30	
Manufacturers	1,062	
Doctors	7	
Livery and garages	535	
Commercial travellers	51	
Firms	4,248	
Real estate agents	13	
Cartage agents	2,229	
Insurance agents	11	
Agents	359	
Contractors	713	
Undertakers	362	
Clerks	37	
Labourers	175	
Managers	92	
Police	22	
Drovers	46	
Soldiers	5	
Unoccupied	329	
Unclassified	378	
Municipal Corporations	293	
Public Utilities	312	
Banks	2	
Railways	47	
Dominion Government	132	
Ontario Government	161	
Hospitals	12	
	19,554	

COMMERCIAL CARS ACCORDING TO TONNAGE

½	2,163	
1	13,863	
1½	1,286	
2	956	
2½	237	
3	197	
3½	330	
4	68	
4½	19	
5	281	
5½	10	
6	10	
6½	2	
7	1	
Electric	50	
Fire truck	81	
		19,554

Motive Power

Gasoline	19,500	
Electric	50	
Steam	4	
		19,554

Registrations

Originals	4,632	
Renewals	14,922	
		19,554

Models

Busses	230	
Delivery cars	4,002	
Trucks	14,848	
Ambulances	107	
Hearses	239	
Casket waggons	36	
Patrols	11	
Fire trucks	81	
		19,554

MOTORCYCLES REGISTERED

Counties.		Cities.		Total.
Algoma	21	Sault Ste. Marie	55	76
Brant	24	Brantford	57	81
Bruce	22			22
Carleton	32	Ottawa	185	217
Dufferin	14			14
Dundas	6			6
Durham	24			24
Elgin	20	St. Thomas	25	45
Essex	66	Windsor	66	132
Frontenac	8	Kingston	39	47
Glengarry	6			6
Grenville	3			3
Grey	23	Owen Sound	13	36
Haldimand	12			12
Haliburton	1			1
Halton	42			42
Hastings	10	Belleville	19	29
Huron	36			36
Kenora	4			4
Kent	21	Chatham	22	43
Lambton	28	Sarnia	19	47
Lanark	15			15
Leeds	23			23
Lennox and Addington	14			14
Lincoln	46	St. Catharines	35	81
Manitoulin	2			2
Middlesex	38	London	130	168
Muskoka	4			4
Nipissing	20			20
Norfolk	19			19
Northumberland	19			19
Ontario	72			72
Oxford	42	Woodstock	25	67
Parry Sound	8			8
Peel	45			45
Perth	26	Stratford	57	83
Peterboro	9	Peterboro	27	36
Prescott	9			9
Prince Edward	21			21
Rainy River	11			11
Renfrew	28			28
Russell	9			9
Simcoe	75			75
Stormont	16			16
Sudbury	2			2
Thunder Bay	6	Fort William	21	
		Port Arthur	28	55
Temiskaming	19			19
Victoria	15			15
Waterloo	75	Galt	48	
		Kitchener	39	162
Welland	65	Niagara Falls	69	
		Welland	38	172
Wellington	30	Guelph	34	64
Wentworth	56	Hamilton	252	308
York	253	Toronto	2,167	2,420
Foreign				4
	1,515		3,470	4,989

MOTORCYCLES ACCORDING TO OCCUPATIONS

Farmers	428
Merchants	164
Tradesmen	2,413
Professional	103
Manufacturers	19
Livery and garages	245
Commercial travellers	76
Firms	34
Real estate agents	3
Cartage agents	13
Insurance agents	10
Agents	28
Contractors	26
Undertakers	1
Clerks	259
Laborers	457
Managers	65
Police	84
Drovers	1
Soldiers	16
Unoccupied	151
Unclassified	339
Municipal Corporations	21
Public Utilities	23
Banks	1
Dominion Government	5
Ontario Government	4
	4,989

Registrations

Originals	433
Renewals	4,556
	4,989

TRAILERS REGISTERED

Counties.		Cities.		Total.
Algoma	2	Sault Ste. Marie	....	2
Brant	2	Brantford	6	8
Bruce	....	.....	....	.....
Carleton	....	Ottawa	1	1
Dufferin	....	.....	....	.....
Dundas	1	.....	....	1
Durham	....	.....	....	.....
Elgin	2	St. Thomas	1	3
Essex	16	Windsor	26	42
Frontenac	1	Kingston	....	1
Flengarry	....	.....	....	....
Grenville	....	.....	....	....
Grey	3	Owen Sound	2	5
Haldimand	2	.....	....	2
Haliburton	....	.....	....	....
Halton	7	.....	....	7
Hastings	....	Belleville	1	1
Huron	26	.....	....	26
Kenora	....	.....	....	....
Kent	20	Chatham	7	27
Lambton	16	Sarnia	3	19
Lanark	1	.. ..	....	1
Leeds	....	.....	....	....
Lennox and Addington	2	.....	....	2
Lincoln	1	St. Catharines	2	3
Manitoulin	....	.....	....	....
Middlesex	7	London	5	12
Muskoka	....	.....	....	....
Nipissing	1	.....	....	1
Norfolk	10	.....	....	10
Northumberland	2	.....	....	2
Ontario	1	.....	....	1
Oxford	3	Woodstock	1	4
Parry Sound	....	.....	....	....
Peel	2	.....	....	2
Perth	....	Stratford	....	....
Peterboro	....	Peterboro	1	1
Prescott	....	.....	....	....
Prince Edward	....	.....	....	....
Rainy River	....	.....	....	....
Renfrew	....	.....	....	.....
Russell	....	.....	....	....
Simcoe	3	.....	....	3
Stormont	....	.....	....	....
Sudbury	....	.....	....	....
Thunder Bay	....	Fort William	....	....
		Port Arthur	....	....
Temiskaming	....	.....	....	....
Victoria	....	.....	....	..
Waterloo	4	Galt	1	5
		Kitchener	3	3
Welland	6	Niagara Falls	....	6
		Welland	....	....
Wellington	4	Guelph	1	5
Wentworth	....	Hamilton	8	8
York	10	Toronto	102	112
Foreign	....	.....	....	1
	155		171	327

PASSENGER MOTOR CAR DEALERS REGISTERED

Counties.		Cities.		Total.
Algoma	3	Sault Ste. Marie	13	16
Brant	5	Brantford	17	22
Bruce	26		....	26
Carleton	7	Ottawa	49	56
Dufferin	14		....	14
Dundas	9		....	9
Durham	6		....	6
Elgin	12	St. Thomas	13	25
Essex	21	Windsor	17	38
Frontenac	4	Kingston	23	27
Glengarry	9		....	9
Grenville	6		....	6
Gray	25	Owen Sound	4	29
Haldimand	12		....	12
Haliburton	1		....	1
Halton	14		....	14
Hastings	26	Belleville	15	41
Huron	30		....	30
Kenora	4		....	4
Kent	37	Chatham	21	58
Lambton	22	Sarnia	9	31
Lanark	7		....	7
Leeds	17		....	17
Lennox and Addington	12		....	12
Lincoln	6	St. Catharines	16	22
Manitoulin	4		....	4
Middlesex	31	London	26	57
Muskoka	7		.	7
Nipissing	10		....	10
Norfolk	22		....	22
Northumberland	13		....	13
Ontario	43		....	43
Oxford	20	Woodstock	8	28
Parry Sound	8		....	8
Peel	11		....	11
Perth	13	Stratford	14	27
Peterborough	4	Peterboro	17	21
Prescott	8		....	8
Prince Edward	7		....	7
Rainy River	6		....	6
Renfrew	20		....	20
Russell	3		....	3
Simcoe	40		....	40
Stormont	10		....	10
Sudbury	12		....	12
Thunder Bay	....	Fort William	6	
		Port Arthur	4	10
Temiskaming	4		....	4
Victoria	12		....	12
Waterloo	13	Galt	11	
		Kitchener	18	42
Welland	18	Niagara Falls	10	
		Welland	10	38
Wellington	11	Guelph	13	24
Wentworth	14	Hamilton	60	74
York	36	Toronto	190	226
Foreign	....		....	43
	735		584	1,362

COMMERCIAL CAR DEALERS REGISTERED

Counties.		Cities.		Total.
Algoma	..	Sault Ste. Marie	..	..
Brant	..	Brantford	3	3
Bruce	..		..	..
Carleton	..	Ottawa	4	4
Dufferin	..		..	..
Dundas	..		..	..
Durham	..		..	..
Elgin	1	St. Thomas	1	2
Essex	6	Windsor	6	12
Frontenac	..	Kingston	2	2
Glengarry	..		..	..
Grenville	1		..	1
Grey	2	Owen Sound	..	2
Haldimand	..		..	..
Haliburton	..		..	..
Halton	2		..	2
Hastings	1	Belleville	3	4
Huron	2		..	2
Kenora	..		..	..
Kent	2	Chatham	2	4
Lambton	1	Sarnia	2	3
Lanark	..		..	..
Leeds	1		..	1
Lennox and Addington	..		..	..
Lincoln	..	St. Catharines	5	5
Manitoulin	..		..	..
Middlesex	1	London	14	15
Muskoka	..		..	..
Nipissing	..		..	..
Norfolk	1		..	1
Northumberland	1		..	1
Ontario	4		..	4
Oxford	1	Woodstock	..	1
Parry Sound	..		..	..
Peel	1		..	1
Perth	2	Stratford	2	4
Peterborough	..	Peterboro	1	1
Prescott	..		..	..
Prince Edward	..		..	..
Rainy River	..		..	..
Renfrew	..		..	..
Russell	..		..	..
Simcoe	2		..	2
Stormont	1		..	1
Sudbury	..		..	..
Thunder Bay	..	Fort William	1	
		Port Arthur	..	1
Temiskaming	..		..	..
Victoria	..		..	..
Waterloo	1	Galt	..	1
		Kitchener	3	3
Welland	3	Niagara Falls	1	4
		Welland	..	..
Wellington	1	Guelph	1	2
Wentworth	3	Hamilton	14	17
York	2	Toronto	38	40
Foreign	..		..	5
	43		103	151

MOTORCYCLE DEALERS REGISTERED

Counties.		Cities.		Total.
Algoma	..	Sault Ste. Marie	..	..
Brant	..	Brantford	..	..
Bruce	..	.....	..	..
Carleton	..	Ottawa	..	..
Dufferin	..	.....	..	..
Dundas	..	.....	..	..
Durham	..	.....	..	..
Elgin	..	St. Thomas	..	..
Essex	..	Windsor	..	..
Frontenac	..	Kingston	..	..
Glengarry	..	.....	..	..
Grenville	..	.....	..	..
Grey	..	Owen Sound	..	..
Haldimand	..	.....	..	..
Haliburton	..	.....	..	..
Halton		.....	..	..
Hastings	..	Belleville	1	1
Huron	..	.....	..	..
Kenora	..	.....	..	..
Kent	..	Chatham	..	..
Lambton	..	Sarnia	..	..
Lanark	..	.....	..	..
Leeds	..	.....	..	..
Lennox and Addington	..	.....	..	..
Lincoln	..	St. Catharines	..	..
Manitoulin	..	.....	..	..
Middlesex	..	London	..	..
Muskoka	..	.....	..	..
Nipissing	..	.....	..	..
Norfolk	..	.....	..	..
Northumberland	..	.....	..	..
Ontario	1	.....	..	1
Oxford	..	Woodstock	..	..
Parry Sound	..	.....	..	..
Peel	..	.....	..	..
Perth	..	Stratford	1	1
Peterborough	..	Peterboro	..	..
Prescott	..	.....	..	..
Prince Edward	..	.....	..	..
Rainy River	..	.....	..	..
Renfrew	..	.....	..	..
Russell	..	.....	..	..
Simcoe	..	.....	..	..
Stormont	..	.....	..	..
Sudbury	..	.....	..	..
Thunder Bay	..	Fort William	..	..
		Port Arthur	..	..
Temiskaming	..	.....	..	..
Victoria	..	.....	..	..
Waterloo	..	Galt	..	
		Kitchener	..	..
Welland	..	Niagara Falls	1	1
		Welland	..	..
Wellington	..	Guelph	2	2
Wentworth	..	Hamilton	2	2
York	..	Toronto	17	17
Foreign	..	.....	..	5
	1		24	30

GARAGES REGISTERED

Counties.		Cities.		Total.
Algoma	31	Sault Ste. Marie	14	45
Brant	9	Brantford	27	36
Bruce	60	..	..	60
Carleton	9	Ottawa	59	68
Dufferin	16	..	..	16
Dundas	17	..	..	17
Durham	20	..	..	20
Elgin	29	St. Thomas	14	43
Essex	65	Windsor	45	110
Frontenac	8	Kingston	33	41
Glengarry	10	..	..	10
Grenville	16	..	..	16
Grey	50	Owen Sound	14	64
Haldimand	27	..	..	27
Haliburton	4	..	..	4
Halton	32	..	..	32
Hastings	50	Belleville	18	68
Huron	61	..	..	61
Kenora	17	..	..	17
Kent	49	Chatham	40	89
Lambton	49	Sarnia	13	62
Lanark	27	..	..	27
Leeds	39	..	..	39
Lennox and Addington	28	..	..	28
Lincoln	39	St. Catharines	20	59
Manitoulin	..	..	..	..
Middlesex	53	London	58	111
Muskoka	27	..	..	27
Nipissing	36	..	..	36
Norfolk	25	..	..	25
Northumberland	46	..	..	46
Ontario	59	..	..	59
Oxford	39	Woodstock	7	46
Parry Sound	21	..	..	21
Peel	25	..	..	25
Perth	26	Stratford	12	38
Peterboro	22	Peterboro	27	49
Prescott	18	..	..	18
Prince Edward	18	..	..	18
Rainy River	11	..	..	11
Renfrew	38	..	..	38
Russell	12	..	..	12
Simcoe	91	..	..	91
Stormont	13	..	..	13
Sudbury	..	..	..	..
Thunder Bay	..	Fort William	10	
		Port Arthur	16	26
Temiskaming	22	..	..	22
Victoria	28	..	..	28
Waterloo	41	Galt	14	
		Kitchener	19	74
Welland	23	Niagara Falls	8	
		Welland	13	44
Wellington	36	Guelph	13	49
Wentworth	18	Hamilton	60	78
York	71	Toronto	360	431
Foreign	..	..	..	..
	1,581		914	2,495

CHAUFFEURS REGISTERED

Counties.		Cities.		Total.
Algoma	113	Sault Ste. Marie	247	360
Brant	91	Brantford	229	320
Bruce	181		....	181
Carleton	97	Ottawa	294	1,039
Dufferin	46		....	46
Dundas	42		....	42
Durham	95		....	95
Elgin	72	St. Thomas	182	254
Essex	351	Windsor	781	1,132
Frontenac	43	Kingston	146	189
Glengarry	41		....	41
Grenville	79		....	79
Grey	146	Owen Sound	194	340
Haldimand	84		....	84
Haliburton	22		....	22
Halton	161		....	161
Hastings	240	Belleville	197	437
Huron	289		....	289
Kenora	34		....	34
Kent	209	Chatham	217	426
Lambton	94	Sarnia	137	231
Lanark	144		....	144
Leeds	226		....	226
Lennox and Addington	107		....	107
Lincoln	101	St. Catharines	278	379
Manitoulin	62		....	62
Middlesex	112	London	790	902
Muskoka	96		....	96
Nipissing	135		....	135
Norfolk	85		....	85
Northumberland	246		....	246
Ontario	247		....	247
Oxford	186	Woodstock	123	309
Parry Sound	79		....	79
Peel	56		....	56
Perth	91	Stratford	101	192
Peterboro	68	Peterboro	193	261
Prescott	66		....	66
Prince Edward	110		....	110
Rainy River	73		....	73
Renfrew	103		....	103
Russell	14		....	14
Simcoe	395		....	395
Stormont	69		....	69
Sudbury	152		....	152
Thunder Bay	2	Fort William	117	
		Port Arthur	76	195
Temiskaming	138		....	138
Victoria	142		....	142
Waterloo	148	Galt	128	
		Kitchener	156	432
Welland	315	Niagara Falls	266	
		Welland	185	766
Wellington	65	Guelph	150	215
Wentworth	126	Hamilton	1,430	1,556
York	370	Toronto	7,606	7,976
Foreign	....		....	78
	6,859		14,871	21,808

APPENDIX

SUMMARY,

Statement of Work and Expenditure

County	Work Done During Year							Roads and Culverts
	Miles Graded	Miles Stoned	Miles Gravelled	Tile Drain Rods	Bridges	Pipe and Tile Culverts	Other Culverts	
								$ c.
Brant	4.46			292		37		27,477 64
Bruce	3.75		2.58	134	11	66	15	57,760 18
Carleton	19.59	10.00	15.83	950	14	61	20	220,516 47
Dufferin	0.30	0.30		42	4	82	1	15,261 00
Elgin	0.52	.93	3.34	385	1	20	2	24,144 59
		Concrete 4.09						
Essex		Bit. Mac. 0.45	3.00		5	32	12	209,140 71
Frontenac	6.00	8.00				36	6	28,796 87
Grey	1.87	.05	7.00		5	6	6	62,118 64
Haldimand	34.50	12.00	11.25			207	2	125,308 17
Halton	1.25	15.25	0.50		1	11	1	75,252 03
Hastings	1.00	1.75	3.00		4	9		20,185 03
Huron			10.50		4		2	16,745 49
Kent	1.00	Concrete 2.48		4,231	3	9	3	85,146 27
Lambton	0.31			111	3	23	13	18,792 99
Lanark		14.50				28	5	54,376 58
Leeds and Grenville	4.75	28.50	5.00		3	73	4	160,012 81
Lennox and Addington		3.00			2			9,051 11
		16.24						
		Bit. Mac 2.96						
Lincoln	5.20	Concrete 2.34	2.70	80	4	261	6	350,283 41
		Asp. Concrete 0.50						
Middlesex	19.62			81	11	23		31,463 94
Norfolk	3.82	Bit. Mac. 1.50	4.00	545	3	29		87,671 74
Northumberland and Durham	4.50		10.00		3	37		26,638 33
Ontario	9.75			4	3	20	18	21,179 97
		1.25						
Oxford		Bit. Mac. 1.75	18.15	4,064	2	5	2	74,245 48
Peel	6.05	3.86	22.07		1	73	2	84,049 32
Perth		0.34	.50	392	3	14	2	64,48 06
Peterboro			2.26		2	3	3	11,684 25
		20.16						
Prescott and Russell	5.95	Bit. Mac. 5.25	6.62	35	11	48	27	454,980 99
Prince Edward		3.37	.88			34		20,665 08
Renfrew	2.25	6.20	31.30	12	6	127	25	187,754 39
Simcoe					7	74	1	18,612 48
Stormont, Dundas and Glengarry	1.50	33.25			1	19	19	360,461 91
Victoria	0.51	1.40	1.43	145	1	28	3	25,841 03
Waterloo		Concrete 1.40	9.00		1	14	7	70,404 98
		15.45						
Welland	6.12	Bit. Mac. 3.86	2.00	14		27	7	205,232 80
Wellington			0.22		14	4	10	9,715 51
Wentworth	3.50			1,192	1		2	19,037 34
		15.67						
York	3.31	Bit. Mac. 7.10	9.70	15	3	81	18	455,114 31
		Asp. Concrete 2.32						
	151.38	*247.47	182.83	12,724	137	1,621	244	3,731,571 90

* Includes—
W.B. Macadam.....211.47 miles.
Concrete..... 10.31 do.
Bituminous Macadam... 22.87 do.
Asphaltic Concrete..... 2.82 do.

No. 1

1921

on County Road Construction

Approved Expenditure for Year								
Bridges	Machinery and Repairs	Special Grants to Towns and Villages	Purchase of Toll Roads and Gravel Pits	Superintendence	Total Approved Expenditure on Construction	Total Approved Expenditure on Maintenance	Total Approved Expenditure	Government Grant 40 per cent.
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
103 93	60,441 70	.....	23,000 00	5,341 03	116,364 30	30,620 97	146,985 27	58,794 11
33,756 33	9,047 53	2,703 77	.....	3,907 34	107,175 15	37,860 13	145,035 28	58,014 11
83,963 29	37,397 99	.....	202,248 13	8,963 34	553,089 22	92,272 86	645,362 08	258,144 83
16,708 20	3,008 45	.....	.....	2,208 24	37,185 89	44,589 13	81,775 02	32,710 01
11,944 11	22,706 92	10,118 00	.....	4,375 03	73,338 65	80,125 08	153,463 73	61,385 49
7,051 35	10,465 00	22,727 59	.....	3,737 64	253,122 29	113,244 83	366,367 12	146,546 85
.....	836 45	.....	.....	1,831 62	31,464 94	24,564 38	56,029 32	22,411 73
18,069 47	24,078 34	8,174 60	.....	5,061 51	117,502 56	88,552 54	206,055 10	82,422 04
.....	4,059 45	5,500 00	.....	2,775 76	137,643 38	29,068 86	166,712 24	66,684 90
1,073 00	5,166 80	1,115 60	.....	2,045 56	84,652 99	11,574 00	96,226 99	38,490 80
20,178 02	25,689 06	.....	.....	4,371 86	70,423 97	61,453 00	131,876 97	52,750 79
2,605 99	4,041 98	16,842 25	.....	4,441 81	44,677 52	81,428 69	126,106 21	50,442 48
4,760 10	26,807 15	11,206 06	.....	4,714 94	132,634 52	50,481 86	183,116 38	73,246 56
14,043 17	35,843 89	8,044 77	.....	4,078 05	80,802 87	62,207 85	143,010 72	57,204 29
2,599 50	8,689 59	.....	.....	3,098 84	68,764 51	34,129 25	102,893 76	41,157 50
5,718 15	29,829 56	4,152 95	.....	3,125 23	202,838 70	61,764 37	264,603 07	105,841 23
1,703 65	3,850 52	12,242 34	.....	2,274 84	29,122 46	28,054 92	57,177 38	22,870 95
14,146 65	11,373 63	.....	.....	8,884 78	384,688 47	53,834 39	438,522 86	175,409 15
16,571 40	28,200 89	7,300 00	.....	4,939 96	88,476 19	103,590 19	192,066 38	76,826 55
97,052 24	29,686 43	.....	.....	3,622 48	218,032 89	131,806 78	349,839 67	139,935 90
10,209 47	1,087 72	14,004 64	.....	2,827 98	54,768 14	33,335 51	88,103 65	35,241 46
6,880 55	3,019 72	4,831 35	.....	4,697 15	40,608 74	49,758 48	90,367 22	36,146 89
7,505 80	14,095 50	8,465 23	.....	2,480 86	106,792 87	66,558 62	173,351 49	69,340 59
12,100 62	3,809 28	.....	.....	2,586 25	102,545 47	29,039 65	131,585 12	52,634 05
7,261 50	.....	.....	.....	1,518 05	15,227 61	60,426 06	75,653 67	30,261 47
7,107 25	2,180 32	.....	.....	2,520 00	23,491 82	24,331 21	47,823 03	19,129 21
48,547 56	10,304 38	3,924 42	.....	3,649 60	521,405 95	10,988 27	532,395 22	212,958 09
.....	6,740 56	5,732 69	.....	2,187 22	35,325 55	36,086 68	71,412 23	28,564 89
21,443 07	13,884 49	6,000 00	.....	6,159 17	235,241 12	28,990 56	264,231 68	105,692 67
16,190 84	2,875 70	30,930 29	.....	3,574 64	72,183 95	134,925 51	207,109 46	82,843 79
3,306 08	14,935 99	10,000 00	.....	5,712 69	394,416 67	67,469 07	461,885 74	184,754 30
1,601 53	16,371 30	6,579 83	.....	4,292 54	54,686 23	21,418 98	76,105 21	30,442 08
8,698 99	3,830 59	.....	.....	2,961 79	85,896 35	43,059 82	128,956 17	51,582 47
.....	7,573 08	30,897 52	.....	3,899 77	247,603 17	64,700 78	312,303 95	124,921 58
39,897 38	5,610 71	2,631 22	.....	3,378 69	61,233 51	97,052 36	158,295 87	63,318 35
4,136 44	19,843 56	.....	.....	5,382 01	48,399 35	175,811 92	224,211 27	89,684 51
34,141 16	3,105 24	557 17	.....	4,589 08	497,506 96	40,926 98	538,433 94	215,373 58
581,126 79	510,489 47	234,682 29	225,248 13	146,217 35	5,429,335 93	2,206,114 54	7,635,450 47	3,054,180 25

APPENDIX

SUMMARY,

Schedule of Expenditure on Maintenance

For the period beginning January 1st, 1921,

County	Grading	Culverts	Resurfacing	Dragging	Oiling or Tarring
	$ c.	$ c.	$ c.	$ c.	$ c.
Brant	1,305 00	125 45	24,176 39	3,185 32	363 22
Bruce	8,421 13	1,280 27	26,016 79	1,317 32	.....
Carleton	4,120 56	1,517 29	66,260 98	1,375 34	13,821 48
					Guard rail
Dufferin	7,180 17	789 90	33,555 50	1,908 83	102 25
Elgin	5,280 54	854 05	60,225 89	7,534 01	.....
Essex	726 87	294 82	93,562 91	17,526 98	461 98
Frontenac	4,478 97	848 36	17,528 19	.....	939 25
Grey	2,388 94	2,851 09	80,140 74	1,275 65	.....
Haldimand	1,076 79	301 75	23,355 00	3,690 00	.....
Halton	.....	401 04	9,496 74	1,154 42	.....
Hastings	11,676 03	2,885 83	39,151 60	1,395 27	.....
Huron	6,813 29	2,620 45	62,830 70	3,392 19	2,826 88
Kent	5,846 20	599 11	26,240 74	11,304 24	.....
Lambton	7,020 68	1,764 17	45,659 94	6,142 20	.....
Lanark	6,383 52	441 80	26,233 28	535 65	.....
Leeds and Grenville	1,723 72	2,455 30	56,412 17	540 85	.....
Lennox and Addington	470 25	328 68	26,535 69	90 25	.....
Lincoln	487 34	662 30	34,044 74	5,430 57	9,655 32
Middlesex	3,203 09	1,452 27	78,260 21	12,373 12	2,920 83
Norfolk	24,046 88	1,615 09	100,657 33	1,862 78	.....
Northumberland and Durham	4,145 47	3,746 25	20,281 90	2,089 20	.....
Ontario	7,303 92	1,076 22	36,000 57	3,001 41	3 50
Oxford	1,821 55	3,903 05	56,428 88	885 65	.....
Peel	1,273 03	491 54	24,802 56	1,325 55	229 50
Perth	4,763 30	47 87	50,579 77	3 80	3,272 13
Peterboro	6,353 51	936 93	15,885 55	.....	.....
Prescott and Russell	3,131 58	262 50	3,789 96	1,713 25	.....
Prince Edward	2,290 90	1,243 73	31,272 02	.....	1,280 03
Renfrew	2,128 52	2,009 85	19,346 82	1,713 77	3,036 71
Simcoe	8,869 40	995 38	121,703 40	1,625 20	310 23
Stormont, Dundas and Glengarry	7,688 74	3,132 29	42,865 20	2,433 42	8,672 60
Victoria	704 97	863 26	14,946 72	2,720 16	561 48
Waterloo	1,106 40	100 95	38,090 98	3,266 19	.....
Welland	3,700 15	169 43	58,793 26	960 35	575 40
Wellington	8,139 43	4,436 27	76,515 48	5,033 58	200 25
Wentworth	12,328 13	8,672 03	145,515 09	2,704 71	5,835 75
York	4,014 66	854 64	14,705 62	930 10	18,045 21
Totals	182,413 63	57,031 21	1,701,869 31	112,441 33	73,114 00

No. 2

1921

and Repair on County Roads

and ending December 31st, 1921

Snow Shovelling	Bridges	Ditching and Draining	Cutting Weeds and Brush	Wire Fence Bonus	Total Expenditure	Total Government Grant, 40%
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
32 00	996 49	Guard rails 23 80	413 30	.....	30,620 97	12,248 39
83 47	741 15	.....	.....	.....	37,860 13	15,144 05
2,099 79	1,694 14	507 25	876 03	.....	92,272 86	36,909 14
49 35	759 73	156 80	86 60	.....	44,589 13	17,835 65
28 85	5,177 56	90 63	933 55	.....	80,125 08	32,050 03
.....	470 68	200 59	.....	.....	113,244 83	45,297 93
65 25	229 40	.....	114 45	360 51	24,564 38	9,825 75
777 60	379 74	.....	.....	738 78	88,552 54	35,421 02
.....	266 17	.....	379 15	.....	29,068 86	11,627 54
114 71	407 09	.....	.....	.....	11,574 00	4,629 60
1,436 24	4,598 86	.....	309 17	.....	61,453 00	24,581 20
152 22	2,773 91	.....	19 05	.....	81,428 69	32,571 48
.....	4,713 38	644 52	999 77	133 90	50,481 86	20,192 74
62 99	558 80	505 24	493 83	.....	62,207 85	24,883 14
.....	535 00	.....	.....	.....	34,129 25	13,651 70
.....	300 38	37 50	.....	294 45	61,764 37	24,705 75
273 22	356 83	.....	.....	.....	28,054 92	11,221 97
16 75	302 75	2,163 94	1,070 68	.....	53,834 39	21,533 76
23 00	2,643 00	1,127 81	1,586 86	.....	104,590 19	41,436 08
1,548 55	1,155 86	Guard rail 660 32	259 97	.....	131,806 78	52,722 71
1,294 05	1,778 64	.....	.....	.....	33,335 51	13,334 20
95 72	294 97	.....	1,440 68	541 49	49,758 48	19,903 39
Snow fence 1,268 95						
5 50	1,133 98	594 56	398 90	117 60	66,558 62	26,623 45
.....	858 82	58 65	.....	.....	29,039 65	11,615 86
266 02	1,493 17	.....	.....	.....	60,426 06	24,170 42
91 78	1,042 44	.....	21 00	.....	24,331 21	9,732 48
1,496 61	131 60	.....	462 77	.....	10,988 27	4,395 31
.....	.....	.....	.....	.....	36,086 68	14,434 67
15 90	413 63	.....	325 36	.....	28,990 56	11,596 22
21 20	583 80	.....	.....	816 90	134,925 51	53,970 20
710 00	1,241 82	.....	725 00	.....	67,469 07	26,987 63
31 85	107 74	462 40	306 85	713 55	21,418 98	8,567 59
.....	495 30	.....	.....	.....	43,059 82	17,223 93
20 40	134 09	.....	347 70	.....	64,700 78	25,880 31
47 85	1,914 92	.....	.....	774 58	97,062 36	38,824 94
273 87	482 34	.....	.....	.....	175,811 92	70,324 77
472 10	1,904 65	.....	.....	.....	40,926 98	16,370 79
12,875 79	43,072 83	7,234 01	11,570 67	4,491 76	2,206,114 54	882,445 79

APPENDIX

SUMMARY,

Statement of Work and Expenditure on

County	Work Done During Year						
	Miles Graded	Miles Surfaced		Tile Drain Rods	Bridges	Pipe and Tile Culverts	Other Culverts
		Other Surfaces	Gravel				
Brant	3.37	0.87 Con. 1.52		1,194	1	20	6
Bruce	0.25	2.50	3.75	21	6	55	7
Carleton	3.00	13.20		682	3	36	32
Dufferin			.06		1	12	
Elgin	0.31		2.5	642		3	
Essex		Bit.Mac. 1.99 Con. 2.32		327	1		4
Frontenac							1
Grey	1.41	9.66	9.00		6		54
Haldimand	2.00					8	
Halton	0.21	2.25 Con. 4.04	3.00	15	3	4	
Hastings	2.50	3.00	3.50			15	1
Huron			1.25		1		1
Kent	2.73	Con. 9.28		2,766	1	22	3
Lambton				432	2	14	5
Lanark		2.25		60		15	2
Leeds and Grenville		3.00				10	4
Lennox and Addington		3.69				3	
Lincoln							
Middlesex	4.25			43	1	2	1
Norfolk		Bit.Mac 3.58		60		7	
Northumberland and Durham			3.50		1	13	
Ontario	8.30			59	4	28	4
Oxford							
Peel							
Perth	0.92		1.25	413			
Peterboro							
Prescott and Russell		Bit.Mac. 5.50				11	4
Prince Edward							
Renfrew	5.25	7.34			1	44	11
Simcoe	1.00	3.10	4.00		6	30	3
Stormont, Dundas and Glengarry		27.00			3	22	14
Victoria		2.73		80	1	23	12
Waterloo		Con. 3.37 Bit.Mac. 5.92	0.12			2	2
Welland		6.78				6	2
Wellington				4			3
Wentworth		3.78					2
York	0.50	Asp.Con.2.02	4.00	48		73	6
	36.00	*130.69	35.93	6,846	42	478	184

* Includes—
W.B. Macadam.....91.14 miles.
Concrete.....20.53 do.
Bituminous Macadam...17.00 do.
Asphaltic Concrete..... 2.02 do.

No. 3

1921

Provincial County Road Construction

Approved Expenditure During Year

Roads and Culverts	Bridges	Special Grants to Towns and Villages	Total Approved Expenditure on Construction	Total Approved Expenditure on Maintenance	Total Approved Expenditure	Government Grant 60%
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
92,686 31	2,884 33	.....	95,570 64	51,998 29	147,568 93	88,541 36
44,626 26	24,586 34	3,146 62	72,359 22	24,061 10	96,420 32	57,852 19
336,454 25	17,879 42	.....	354,333 69	10,407 63	364,741 30	218,844 78
4,229 43	2,527 46	.....	6,756 89	6,805 22	13,562 11	8,137 27
5,838 46	.....	1,987 00	7,825 46	19,414 21	27,239 67	16,343 80
107,427 15	1,225 50	3,250 00	111,902 65	15,305 41	127,208 06	76,324 84
346 73	.....	.....	346 73	10,715 58	11,062 31	6,637 39
206,795 90	8,371 59	9,250 00	224,417 49	4,301 64	228,719 13	137,231 48
1,415 52	.....	.....	1,415 52	485 62	1,901 14	1,140 68
125,556 30	5,191 42	.....	130,747 72	7,369 15	138,116 87	82,870 12
19,150 22	.....	.....	19,150 22	52,351 41	71,501 63	42,900 98
3,658 36	5,223 54	2,336 68	11,218 58	39,738 35	50,956 93	30,574 16
318,583 19	20,126 23	19,125 69	357,835 11	26,978 99	384,814 10	230,888 46
7,684 15	16,590 15	1,328 17	25,602 47	29,751 28	55,353 75	33,212 25
39,231 44	.....	.....	39,231 44	4,129 90	43,361 34	26,016 80
22,181 19	.....	.....	22,181 19	13,816 38	35,997 57	21,598 54
12,581 60	.....	.....	12,581 60	21,909 64	34,491 24	20,694 74
.....	.....	.....	.....	.....	.....	.....
3,671 98	4,411 87	.....	8,083 85	18,448 78	26,532 63	15,919 58
77,478 58	.....	.....	77,478 58	8,481 95	85,960 53	51,576 31
15,210 10	1,339 16	.....	16,549 26	16,137 60	32,686 86	19,612 12
8,454 17	9,816 50	2,322 05	20,592 72	20,411 51	41,004 23	24,602 54
16 50	.....	9,545 33	9,561 83	23,974 61	33,536 44	20,121 86
.....	.....	.....	.....	.....	.....	.....
3,463 09	.....	.....	3,463 09	4,321 56	7,784 65	4,670 79
.....	.....	.....	.....	4,327 89	4,327 89	2,596 73
123,630 84	.....	.....	123,630 84	.....	123,630 84	74,178 50
.....	.....	.....	.....	12,894 34	12,894 34	7,736 60
171,516 80	4,860 65	5,000 00	181,377 45	4,998 49	186,375 94	111,825 56
50,539 12	12,772 57	16,588 16	79,899 85	45,585 49	125,485 34	75,291 21
354,742 36	10,159 29	.....	364,901 65	40,429 50	405,331 15	243,198 69
58,922 85	1,958 71	5,915 09	66,796 65	10,459 89	77,256 54	46,353 92
85,991 67	.....	.....	85,991 67	5,599 91	91,591 58	54,954 95
135,871 18	.....	3,567 47	139,438 65	24,018 33	163,456 98	98,074 19
2,145 70	.....	.....	2,145 70	32,040 73	34,186 43	20,511 86
926 78	.....	.....	926 78	27,804 87	28,731 65	17,238 99
91,214 87	18,226 17	.....	109,441 04	19,606 46	129,047 50	77,428 50
2,532,243 05	168,150 90	83,362 26	2,783,756 21	659,081 71	3,442,837 92	2,065,702 74

APPENDIX

SUMMARY,

Schedule of Expenditure on Maintenance

For the period beginning Jan. 1st, 1921,

County	Grading	Culverts	Resurfacing	Dragging	Oiling or Tarring
	$ c.	$ c.	$ c.	$ c.	$ c.
Brant	721 51	59 63	37,666 77	2,511 99	3,483 92
Bruce	5,226 23	705 51	16,252 10	1,497 64	.....
Carleton	915 09	11 00	1,710 65	280 00	5,437 07
					Guard rail
Dufferin	630 30	115 12	5,398 00	287 60	38 30
Elgin	783 50	118 25	16,178 43	1,976 08	.....
Essex	526 45	293 23	6,862 06	7,137 32	.....
Frontenac	3,227 72	385 98	6,858 70	.....	.....
Grey	667 05	197 89	2,932 45	261 15	130 55
Haldimand	36 00	2 82	.....	430 30	.....
Halton	.....	86 75	6,682 70	587 70	.....
Hastings	19,482 08	1,332 02	30,258 47	552 68	680 66
Huron	2,742 68	1,277 70	29,658 39	1,369 96	24 34
Kent	794 90	320 94	20,303 33	4,545 05	.....
Lambton	5,209 17	208 77	19,851 28	2,728 44	47 95
Lanark	1,500 00	.....	2,429 90	200 00	.....
Leeds and Grenville	.....	.....	13,816 38	.....	.....
Lennox and Addington	544 50	93 28	20,310 33	22 60	.....
Lincoln	.....	.....	.....	.....	.....
Middlesex	899 28	72 45	14,608 26	1,733 56	179 87
Norfolk	1,202 87	93 27	6,237 71	291 55	420 00
Northumberland and Durham	1,700 00	635 13	11,082 47	1,000 00	.....
Ontario	2,091 15	465 69	14,617 14	2,005 94	9 00
Oxford	411 53	191 49	23,166 35	50 50	.....
Peel	.....	.....	.....	.....	.....
Perth	1,326 65	26 25	2,780 51	.....	.....
Peterboro	697 88	59 70	3,570 31	.....	.....
Prescott and Russell	.....	.....	.....	.....	.....
Prince Edward	1,413 60	399 20	10,769 12	.....	312 42
Renfrew	226 10	71 65	1,275 83	691 50	2,330 91
Simcoe	2,991 77	45 00	40,601 68	1,316 00	.....
Stormont, Dundas and Glengarry	1,808 54	649 28	19,071 54	380 45	17,059 64
Victoria	133 25	252 13	7,351 30	1,313 29	213 75
Waterloo	476 20	.....	4,317 38	62 62	.....
Welland	336 60	41 88	22,249 19	320 85	1,009 31
Wellington	5,651 03	991 57	22,524 73	1,523 96	1,194 72
Wentworth	2,209 79	2,155 99	21,694 40	484 00	1,260 69
York	1,703 49	89 30	9,238 06	382 80	8,079 21
Totals	68,286 91	11,448 87	472,325 92	35,945 53	41,912 31

No. 4

1921

and Repair on Provincial County Roads

and ending December 31st, 1921.

Snow Shovelling	Bridges	Ditching and Draining	Cutting Weeds and Brush	Wire Fence Bonus	Total Expenditure	Total Government Grant, 60%
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
59 00	7,149 45	.....	346 02	.....	51,998 29	31,198 97
110 10	269 52	.....	.....	.....	24,061 10	14,436 66
734 96	59 91	1,250 00	8 95	.....	10,407 63	6,244 58
9 90	41 00	94 45	190 55	.....	6,805 22	4,083 13
.....	.....	84 30	273 65	.....	19,414 21	11,648 53
.....	486 35	.....	.....	.....	15,305 41	9,183 25
3 50	175 58	.....	.....	64 10	10,715 58	6,429 35
39 35	.....	73 20	.....	.....	4,301 64	2,580 98
.....	.....	.....	16 50	.....	485 62	291 37
.....	12 00	.....	.....	.....	7,369 15	4,421 49
22 50	23 00	.....	.....	.....	52,351 41	31,410 85
19 40	4,627 88	.....	18 00	.....	39,738 35	23,843 01
.....	165 41	403 61	445 75	.....	26,978 99	16,187 39
			Oper'g Ferry			
.....	869 82	7 46	828 39	.....	29,751 28	17,850 77
.....	.....	.....	.....	.....	4,129 90	2,477 94
.....	.....	.....	.....	.....	13,816 38	8,289 83
5 95	932 98	.....	.....	.....	21,909 64	13,145 78
.....	.....	.....	.....	.....	.....	.....
36 15	73 05	465 88	380 28	.....	18,448 78	11,069 27
		Guard rails				
89 20	4 80	2 00	140 55	.....	8,481 95	5,089 17
940 00	530 00	.....	250 00	.....	16,137 60	9,682 56
17 70	187 66	.....	467 33	549 90	20,411 51	12,246 91
.....	3 00	31 52	120 22	.....	23,974 61	14,384 77
.....	.....	.....	.....	.....	.....	.....
13 00	175 15	.....	.....	.....	4,321 56	2,592 94
.....	.....	.....	.....	.....	4,327 89	2,596 73
.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	12,894 34	7,736 60
.....	12 50	.....	390 00	.....	4,998 49	2,999 09
28 00	398 99	.....	.....	204 05	45,585 49	27,351 29
717 00	437 30	.....	305 75	.....	40,429 50	24,257 70
13 75	12 30	668 96	219 16	282 00	10,459 89	6,275 93
.....	743 71	.....	.....	.....	5,599 91	3,359 95
.....	.....	.....	60 50	.....	24,018 33	14,411 00
2 10	.....	.....	.....	152 62	32,040 73	19,224 44
.....	.....	.....	.....	.....	27,804 87	16,682 92
113 60	.....	.....	.....	.....	19,606 46	11,763 88
2,975 16	17,391 36	3,081 38	4,461 60	1,252 67	659,081 71	395,449 03

APPENDIX No. 5

SUMMARY, 1921

Expenditure on Township Roads

The following schedule shows in detail the work and approved expenditure on Township Roads during 1921, and upon which Provincial subsidies were paid in 1922, under the provisions of the Ontario Highways Act.

Number of Townships	Approved Expenditure for Year						Government Grant 20%	Superintendence		Total Approved Expenditure	Total Governm't Grant
	Roads and Culverts	Bridges	Maintenance	Machinery	Purchase of Gravel Pits	Approved Expenditure		Expenditure	Governm't Grant 40%		
294	$844,829 42	$501,650 14	$1,888,048 75	$142,316 18	$12,420 81	$3,389,265 30	$677,852 90	$76,585 03	$30,634 01	$3,465,850 33	$708,486 91

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LIST OF PUBLICATIONS ISSUED BY THE DEPARTMENT OF PUBLIC HIGHWAYS.

Pub. No.	Title.
	Annual Reports.
	Annual Proceedings, Ontario Good Roads Association.
9.	Report of the Ontario Highways Commission, 1914.
10.	Regulations respecting Township Road Superintendents, 1916.
11.	Regulations respecting County Roads, 1920.
14.	Township Road Improvement, 1918.
15.	The Motor Vehicles Act, The Highway Travel Act, The Load of Vehicles Act, The Public Vehicles Act, 1920.
16.	General Specifications for Concrete Highway Bridge, 1920.
17.	General Specifications for Steel Highway Bridges, 1917.
18.	Highway Bridges, 1917.
19.	General Plans for Steel Highway Bridges, 1917.
20.	Description of Road Models Exhibit, 1917.
21.	Short Forms for Bridge Tenders, 1917.
22.	Report on Street Improvement, 1917.
23.	Bituminous Surfaces for Macadam Roads, 1917.
24.	Specifications for Bituminous Materials, 1917.
25.	County Road Legislation, as enacted by The Highway Improvement Act, The Ontario Highways Act, and The Obstructions on Highways Removal Act, 1920.
27.	Widening the Provincial Highway, 1919.
28.	Main Road Legislation, 1919.
29.	Regulations respecting Township Roads, 1920.
30.	Township Road Legislation, as enacted by The Ontario Highways Act, 1920.
31.	Motor Vehicle Headlamps.
32.	Report of Committee on Road Accounting.
33.	The Provincial Highway Act, 1922.
34.	The Planting and Care of Roadside Trees, 1923.

The Second Annual Report

OF THE

DEPARTMENT OF LABOUR

INCLUDING THE REPORTS OF THE ADMINISTRATION OF

The Stationary and Hoisting Engineers' Act, The Factory Shop and Office Building Act, The Employment Agencies' Act, The Steam Boiler Act, The Ontario Government Offices of the Employment Service of Canada.

Province of Ontario

1921

PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO

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1922

Printed by
THE RYERSON PRESS.

To His Honour HENRY COCKSHUTT,

Lieutenant-Governor of the Province of Ontario.

I beg to submit herewith for your consideration the Second Annual Report of the Department of Labour for the year 1921.

Respectfully submitted,

W. R. ROLLO,

Minister of Labour.

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REPORT OF THE DEPUTY MINISTER OF LABOUR FOR 1921

INTRODUCTION

In submitting the annual reports of the administrative branches of the Department of Labour it may be stated that practically the whole of such administration was accomplished previous to my appointment as Deputy Minister. These reports indicate that the work of the Department of Labour, which was established in 1919, is increasing in volume and importance.

The Factory Inspection Branch, through the chief inspector, administers the Factory, Shop and Office Building Act. This Act is framed to safeguard the life and limb of workers through inspection of plants and equipment, and by having protective appliances attached to machinery and installed in buildings; to promote health and safety through effective sanitary arrangements, and to control the length of the working day and week for women and young persons.

The regulations enforced by the Steam Boiler Branch are designed to ensure the proper materials and workmanship being used in the construction and repair of steam boilers and other pressure vessels, and a staff of inspectors, under certain conditions, apply tests to determine the strength, guarantee the safety of operation and increase the efficiency of vessels in which steam, gas, air or liquid is contained under pressure. All pressure vessels whose designs have been approved and registered by the Steam Boiler Branch are constructed or repaired according to the highest standards known to engineering science.

The Stationary Engineers' Branch is responsible for the examination and licensing of engineers who operate stationary or portable steam plants. Four grades of certificates are issued and the possession of a certificate is a reasonable guarantee of the efficiency of the operator. It also protects the owners by ensuring that their plants are operated by competent persons, and consequently the safety of the public is enhanced.

The Employment Service is for the purpose of dealing with an important phase of the unemployment situation. It endeavours to secure the most reliable information regarding employment vacancies in agricultural, commercial, domestic and industrial business; it directs the applicants for employment to positions, without loss of time and with the minimum of expense; selects for the employer the person best qualified for the position offered; co-operates with the municipalities in mobilizing and distributing large numbers of workers for emergency work during abnormal periods, and gathers reliable data for dealing with unemployment of a complex character. That the Employment Service is becoming better known and appreciated is exemplified by the large volume of business which was transacted during the year.

A survey of labour conditions throughout the province indicates that the volume of employment during 1921 did not show any increase compared with the 1920 period. From reports made by trade unions in the province the average unemployed membership during 1920 was 3.55%, and for 1921 period was 9.43%

During 1920 the number of persons who registered for work at the Ontario Offices of the Employment Service of Canada was 175,925 as compared with 185,946 registrations during 1921. The number of positions offered by employers during 1920 was 172,767, and in 1921 the vacancies reported were 136,858.

Industrial depression, which was world-wide, had a considerable effect on the basic industries of the province. Development of home and export trade has been hampered by the uncertain and complex condition of the money market. In manufacturing, the textile groups experienced the greatest activity, particularly in the cotton and woollen industries, some factories having requested overtime permits. There was renewed activity in the leather industry, some factories operating full time with the usual staff. Manufacturers in iron and steel, glass, lumber and rubber show a slight decline. Bush work was not so busy as during the previous year. Activity in building and construction work was still maintained, although the estimated value of building permits was less than the former year. Reductions in cost of material and wages would probably account for the shrinkage in value.

An appreciable decline in money wages took place during the year. In the building trades a decline of 10% took place. Wages for bushmen fell 50% and practically went back to the 1913 level. In the manufacturing industries a decline as high as 25% has been reported, the greatest reductions being in the metal trades and iron and steel works. Declines of 5% to 15% took place in the textile groups and in pulp and paper mills. The printing trades have been an exception, some increases in wages taking place. Wages offered for farm workers during the summer of 1921 ranged from $25.00 to $45.00 per month, compared with $40.00 to $60.00 per month in 1920.

There has been practically no change in the number of hours worked in the various industries throughout the province.

Fifty-three industrial disputes took place during the year and of these only eleven were due to causes other than disagreement regarding wages.

During the month of August an advisory committee on unemployment was appointed to advise the Ontario Government on matters pertaining to unemployment, as a recurrence of conditions experienced during the previous year was foreshadowed by the state of trade and the condition of the labour market. The Committee advised the Government to co-operate with the municipalities and the Federal Government in providing work for the relief of the unemployed, and initiated an advertising campaign embodying a plan of co-operation between various trade interests in an effort to stimulate industry and create employment. This Department was associated with the Committee in carrying out their campaign.

Under date of October 7, 1921, the Dominion Government issued an order whereby local authorities who undertook to put in operation any necessary public works during the winter season should be re-imbursed by the Federal and Provincial Governments for a proportion of the excess cost over normal cost of such undertakings. The normal cost had to be borne by the municipality and the excess cost over and above normal would be shared equally by the municipality and the Dominion and Provincial Governments. A later order issued by the Dominion Government increased the Federal proportion of excess cost from one-third to one-half, the cost of the Provincial Government remaining the same and the municipal proportion of excess cost being reduced to one-sixth.

Supplementing these measures the Dominion Government agreed to refund one-third of the disbursement actually made by the municipality for the relief of the unemployed, conditional upon the province and the municipality participating equally.

Special provision was made by the Dominion Government for dealing with ex-service men in necessitous circumstances due to unemployment. The Dominion Government agreed to assume one-half of the total cost of relief given to unemployed ex-service men, the remaining one-half being borne equally by the province and the municipality.

The representatives of various municipalities had a conference with the Government relative to providing work and giving assistance to those in necessitous circumstances due to lack of employment. It was agreed that in the first instance every effort would be made by the municipalities to provide work in accordance with the Federal-Provincial-Municipal scheme, and the work of drafting and enforcing regulations to deal with the disbursing of unemployment relief throughout the province was undertaken by this Department. In previous years this work was carried out by the Department of the Provincial Secretary.

The Government was represented at the Third General Conference of the International Labour Organization of the League of Nations, held in Geneva, Switzerland, from October 25th to November 19th, by the Honorable W. R. Rollo, Minister of Labour. He was appointed to the commission dealing with technical agricultural education and the right of agricultural workers to membership in labour organizations.

J. H. H. Ballantyne,

Deputy Minister.

LABOUR LEGISLATION, 1921.

The Stationary and Hoisting Engineers Act, 1921.

Important amendments extend the operation of the Act to include gas plants in addition to steam plants. The definition of "steam plant" is revised to include steam pumps, while "hoisting plants" take in those used for portable or industrial work. The Act is made applicable to stationary steam plants of 25 horse-power and over instead of 50 horse-power and over as previously, and to steam heating plants with safety valves set at over 10 pounds instead of 20 pounds as previously. Locomotive engines on chartered railroads are eliminated from the scope of the Act and hoists in quarries are brought under it. The issuing of certificates to operate plants is limited to British subjects and for those who have the necessary residence qualifications for becoming Canadian citizens and have made application for naturalization papers. A new emergency clause has been adopted which provides that any person may perform the duties of an engineer for fourteen days during the absence of an engineer for any reason other than dismissal, but at the end of that period a properly qualified engineer must be employed.

Other amendments make more severe penalties for impersonation at examinations or for operating without a certificate.

The Factory, Shop and Office Building Act, 1921.

The principal amendment to the Factory Act provides for bringing the Act into conformity with the Adolescent School Attendance Act. This means that no child under the age of sixteen years will be permitted to work in a factory, shop or office without a school permit. The age at which a child may be employed in a shop is raised from twelve to fourteen years. The providing of seats for female employees, which was previously compulsory in shops, is made compulsory in factories and offices where, in the opinion of the Factory Inspector, a substantial portion of the work can be efficiently performed while seated.

A further amendment provides for the compulsory closing of any class of shops in any municipality for a weekly half-holiday.

The Department of Labour Act, 1921.

An amendment to the Trades and Labour Branch Act gives the Lieutenant-Governor in Council power to create Provincial and Local Employment Service Councils. The purpose of these councils is to act in an advisory capacity to the Government Employment Service.

The Minimum Wage Act, 1921.

The amendment authorizes the Minimum Wage Board to suspend or vary any of its orders in accordance with changed conditions in any industry or establishment and to vary its orders for the same industry in different localities.

The Mothers' Allowances Act, 1921.

The Mothers' Allowances Act has been broadened to include the mother who has been deserted for five years, and the mother with one child under fourteen who has also a child over fourteen or a husband who is permanently disabled. A grandmother, sister, aunt or suitable foster mother who has the care of two orphan

LABOR LEGISLATION 1921, ONT.

children and inadequate means to support them is now eligible for an allowance. Most important provision has been made for the handling of cases which do not come strictly within the terms of the Act by which the Lieutenant-Governor in Council, upon the recommendation of the Commission, may grant an allowance to a needy case. This clause is very important and far reaching and will cover a number of deserving cases for which provision could not otherwise be made. Negotiations may now be entered upon for reciprocal arrangements between Provinces for the payment of allowances to mothers moving from one Province to another. Probably the most striking change in the Act, however, is the clause raising the age limit to sixteen years, to conform with the Adolescent School Attendance Act.

Resolution re Labour Legislation Conference.

As there is some question as to whether certain subjects which are of vital interest to labour are matters for Dominion or Provincial legislation, the Provincial Legislature passed a resolution calling for a conference of representatives of the various governments of the Provinces and the Dominion Government, at which would be discussed such matters as the eight hour day, unemployment insurance, old age pensions etc. and a decision arrived at as to just where the responsibility for enacting legislation along these lines lies. At the conclusion of the conference the Department of Labour is to investigate and report upon those subjects which are provincial in scope.

ONTARIO GOVERNMENT EMPLOYMENT BUREAUS

EMPLOYMENT SERVICE OF CANADA

GENERAL SUPERINTENDENT, H. C. HUDSON

The conclusion of another year's activities in public employment work in this province finds the Ontario Employment Offices of the Employment Service of Canada continuing to serve ever broadening circles of industrial and community life. Although the offices have, of necessity, devoted a large portion of their efforts towards various phases of unemployment relief work, the fact that the primary function of a public employment service is not relief but employment has been constantly emphasized.

No phase of the work has been more promising than the development of the farm employment work during the year. There is a natural reluctance on the part of the employer in rural districts to place a definite order with a definite statement of wages in a public employment office. Lacking the opportunity of interviewing the applicant who will be sent him, the farmer is inclined to evade the question of the wage to be paid until the worker has arrived "on the job." He would prefer to place the order with the proviso that he "will pay what the man is worth." Experience has indicated however, that such orders are virtually impossible to fill, the applicant refusing, as a general rule, to travel any distance to obtain a position where he has no guarantee of at least the minimum remuneration which he will receive. No more striking proof of the growing confidence shown towards the service on the part of both the employer and the employee may be given than the fact that farm placement work consistently increases in volume in direct proportion to the publicity which the work receives.

The Toronto office naturally handles the major portion of the farm placement work and particulars of the results accomplished by this section will be found on page 13.

The following table of farm wages covers about 80 per cent of all orders for farm help received at the Toronto Office from May to October, 1921. In the majority of other orders received no definite wage was stated, although there were a few, principally for boys, in which the offer was less than $20 per month.

An analysis of these 2110 orders shows that 192 were for married couples and 1918 for single men. Fifty-three of the requests for married couples were on a yearly basis at wages ranging from $450 to $700 per year, $600 being by far the most frequent offer. The employing farmer has found that this type of labour makes for continuity of help through the busy seasons and is on the whole more satisfactory, particularly where a separate house can be provided.

Offers for married men by the month ranged from $30 to $80 per month, the prevailing rate being around $50.

Very few offers were made for single men on a yearly basis. By the month single men were offered from $20 to $60, one one hundred dollar a month vacancy being reported. The majority of the orders ranged from $25 to $40 per month as compared with $35 to $60 during the previous year.

It also appears that wages steadily declined during the summer of 1921, the most frequent wage in May being $40 per month, in June and July $35, and in September and October $30.

TABLE I. WAGES OFFERED FOR FARM LABOUR

TORONTO EMPLOYMENT OFFICE, 1921

(1) Married Couples

Wages	May	June	July	August	Sept.	October	Total number of orders
$450.00 per year					2		2
500.00 " "	3					1	4
600.00 " "	24	13	8				45
700.00 " "					2		2
30 00 per month		4					4
40 00 " "			4		2	1	7
45.00 " "			2	6	10	4	22
50.00 " "	3	42	18	14			77
60 00 " "	13	4					17
65.00 " "	4		2				6
70 00 " "			2				2
75 00 " "	2						2
80 00 " "			2				2

(2) Single Men

Wages	May	June	July	August	Sept.	October	Total number of orders
$300.00 per year			3				3
400.00 " "						1	1
500.00 " "	1		1		3		5
600 00 " "	2	1			1	1	5
700 00 " "			1				1
20.00 per month	8	11	13	10	6	12	60
25.00 " "	12	27	37	39	51	73	239
30 00 " "	38	107	89	107	136	123	600
35.00 " "	50	129	200	76	19	15	489
40 00 " "	97	94	183	45	22	4	445
45.00 " "	2	3	26	6	4	2	43
50.00 " "	2	3	14	2	2		23
60.00 " "			3				3
100 00 " "			1				1

Because of the industrial situation there was a marked falling off in the number of orders placed by employers during the year ending October 31st, 1921 as compared with the previous twelve months. A corresponding reduction in the number of placements in regular employment is seen in table II, while the number of casual positions offered—i.e. those of less than one week's duration —shows an increase which may be attributed, in part at least, to appeals made throughout the province for "odd jobs for unemployed workers."

On page 15 will be found a table which compares by four week periods, the placements made by the employment offices during the past two years on the basis of relationship between registrations and placements. This table reflects the changes in the industrial situation during the twenty-four months under examination.

TABLE II. COMPARISON OF THE ACTIVITIES OF THE ONTARIO OFFICES OF THE EMPLOYMENT SERVICE OF CANADA, FOR THE FISCAL YEARS 1920 AND 1921

Offices	Applications for work		Vacancies Notified		Placements			
	1921	1920	1921	1920	Regular 1921	Casual 1921	Regular 1920	Casual 1920
Arnprior	.....	149	.....	61	.....	.....	144	.....
Belleville	1341	1352	1501	1673	1073	183	1295	.....
Brantford	3501	2329	3016	2356	1726	1122	1493	745
Brockville	.....	579	.....	388	.....	.....	420	.....
Chatham	3180	4167	2969	4305	2270	155	4157	.....
Cobalt	1950	1948	1999	2648	1591	32	1940	.....
Cornwall	.....	574	.....	442	.....	.....	465	.....
Fort William	5146	5450	5261	8258	3637	221	4339	34
Galt	.....	344	.....	545	.....	.....	344	.....
Guelph	2408	2743	1936	3217	1048	48	1915	.....
Hamilton—Men	11230	7291	3561	6762	2353	1574	6585	.....
Hamilton—Women	6026	3909	4977	5077	907	3045	799	2200
Kingston	3459	2757	2779	2216	2472	121	2104	.....
Kitchener	2081	3010	1179	4446	682	93	2998	.....
Lindsay	.....	420	.....	384	.....	.....	357	.....
London—Men	3686	3332	3031	3141	2455	306	2648	15
London—Women	1769	1055	1844	1505	655	343	598	279
Niagara Falls	1469	745	1620	1958	686	30	716	.....
North Bay	3293	3600	2981	3962	2415	72	3454	.....
Orillia	.....	618	.....	680	.....	.....	498	10
Oshawa	2137	1113	1670	1581	1146	223	1030	29
Ottawa—Dalhousie St	533	2202	282	664	344	1	1998	.....
" Queen St.—Men	7117	8826	3270	5434	4266	292	6418	.....
" Queen St.—Women	2099	1553	2538	1932	727	708	400	648
Owen Sound	.....	643	.....	545	.....	.....	526	.....
Pembroke	1234	1663	1306	1916	1157	1	1612	.....
Peterborough	2085	2523	1807	2541	1648	6	2098	.....
Port Arthur	9863	7422	11162	9511	7803	136	6549	100
St. Catharines	3652	3935	2798	5097	1896	256	3263	.....
St. Thomas	2415	1556	1726	1750	972	542	1430	.....
Sarnia	1232	1201	1285	1274	1124	74	1181	.....
Sault Ste. Marie	6829	8859	5307	11220	3559	78	8854	.....
Stratford	.....	593	.....	785	.....	.....	435	.....
Subdury	7274	9368	10076	13638	6591	4	9339	23
Timmins	3437	3295	4314	4831	2490	16	3287	.....
Toronto:								
Men's Industrial	40155	42788	13106	21888	8454	1453	7512	154
" Farm	6786	4748	4956	4296	5695	.....	3250	.....
" Unskilled	5062	10639	2238	7201	4186	.....	8892	.....
" Professional	.....	1305	.....	758	.....	.....	578	.....
" Handicap	.....	477	.....	361	.....	.....	339	.....
Bloor Street	.....	1542	.....	1192	.....	.....	1025	.....
Women's Industrial	3398	1506	1994	4459	881	19	678	11
" Clerical	4942	4258	1816	2890	1393	115	2148	.....
" Domestic	20336	13623	22795	24670	3396	11399	1997	12869
" Farm	740	790	976	1136	419	.....	517	.....
Welland	.....	562	.....	1056	.....	.....	384	.....
Windsor	4081	5969	2782	5682	2448	531	5726	.....
	185946	189331	136858	192332	84565	23199	118735	17117

TABLE III. COMPARISON OF PLACEMENTS BY FOUR WEEK PERIODS FOR FISCAL YEARS 1920 and 1921

Period.	Placements		Placements per hundred Registrations	
	1920	1921	1920	1921
Four weeks ending:				
November 27	10351	10747	80.8	56.9
December 25	7873	7259	61.8	47.9
January 22	8493	7368	40.1	42.8
February 19	9363	6831	56.0	41.8
March 19	9443	6210	60.0	48.6
April 16	11384	7331	77.8	61.9
May 14	11732	8793	84.4	67.1
June 11	10729	7463	84.7	66.3
July 9	11464	9171	82.6	75.1
August 6	11237	9110	80.5	66.4
September 3	11371	8888	83.1	65.1
October 1	11295	9380	82.3	68.7
October 31	11117	9213	80.9	61.0
Totals	135852	107764	71.7	58.0

TABLE IV. SUMMARY OF THE ACTIVITIES OF THE ONTARIO OFFICES OF THE EMPLOYMENT SERVICE OF CANADA, BY FOUR WEEK PERIODS, FROM NOVEMBER 1ST, 1920—OCTOBER 31ST, 1921

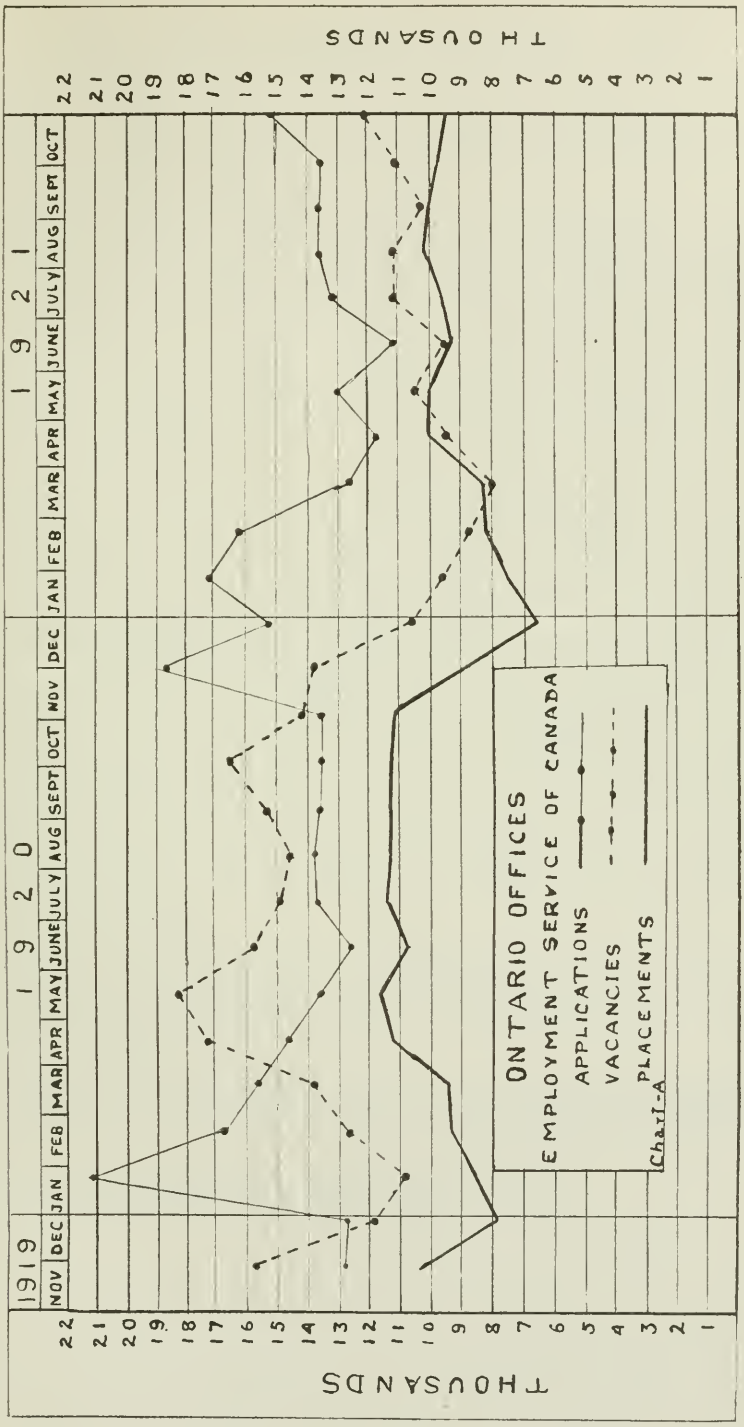
1920–21	Applications for work	Vacancies Notified	Placements		
			Regular	Casual	Totals
Four weeks ending					
November 27	18892	13992	9288	1459	10747
December 25	15156	10772	6476	783	7259
January 22	17208	9709	5476	1892	7368
February 19	16345	8772	5408	1423	6831
March 19	12782	8001	4572	1638	6210
April 16	11852	9624	5576	1755	7331
May 14	13109	10565	6607	2186	8793
June 11	11258	9589	5726	1737	7463
July 9	13216	11157	7274	1897	9171
August 6	13724	11125	7347	1763	9110
September 3	13644	10361	7036	1852	8888
October 1	13647	11116	6916	2464	9380
October 31	15113	12075	6863	2350	9213
Totals	185946	136858	84565	23199	107764

During the four weeks ending Nov. 27, 1919, for example, 80.8 per cent of all applicants who registered at Ontario Employment offices were placed in positions. This relatively high percentage was followed by a decline—largely due to seasonal and climatic conditions—during the months from December to March. The improvement, which commenced early in April 1920, continued throughout the balance of the fiscal year, with the result that the relationship of registrations to placements during the entire twelve months stood at 71.7%.

From November 1920 to March 1921 there was a marked decrease in the number of placements made, followed by a slight but consistent improvement throughout the remainder of the fiscal year. It will be noted from the table, however, the average for 1920-21 is 58% which is 13.7% lower than the figure for the previous year. The normal efficiency of a public employment service probably lies midway between these two points, as the demand for workers was abnormal in 1919-20 and subnormal in 1920-21.

No attempt has been made in this report to provide detailed information with regard to the work of the individual offices. On pages 23 to 28, however will be found the report made by the superintendent of the Toronto office. As the office in Toronto is the largest in the province, the outline of its activities furnishes the best possible example of the wide service rendered by an efficient public employment office.

In the report of the Toronto superintendent will be found a brief summary of the attempts which are being made to solve the problem of the handicapped adult worker, and the equally difficult problem of the proper placement of boys and girls entering industry.


ONTARIO OFFICES
EMPLOYMENT SERVICE OF CANADA
APPLICATIONS
VACANCIES
PLACEMENTS
Chart-A
THOUSANDS
1919
1920
1921
NOV DEC JAN FEB MAR APR MAY JUNE JULY AUG SEPT OCT NOV DEC JAN FEB MAR APR MAY JUNE JULY AUG SEPT OCT
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22

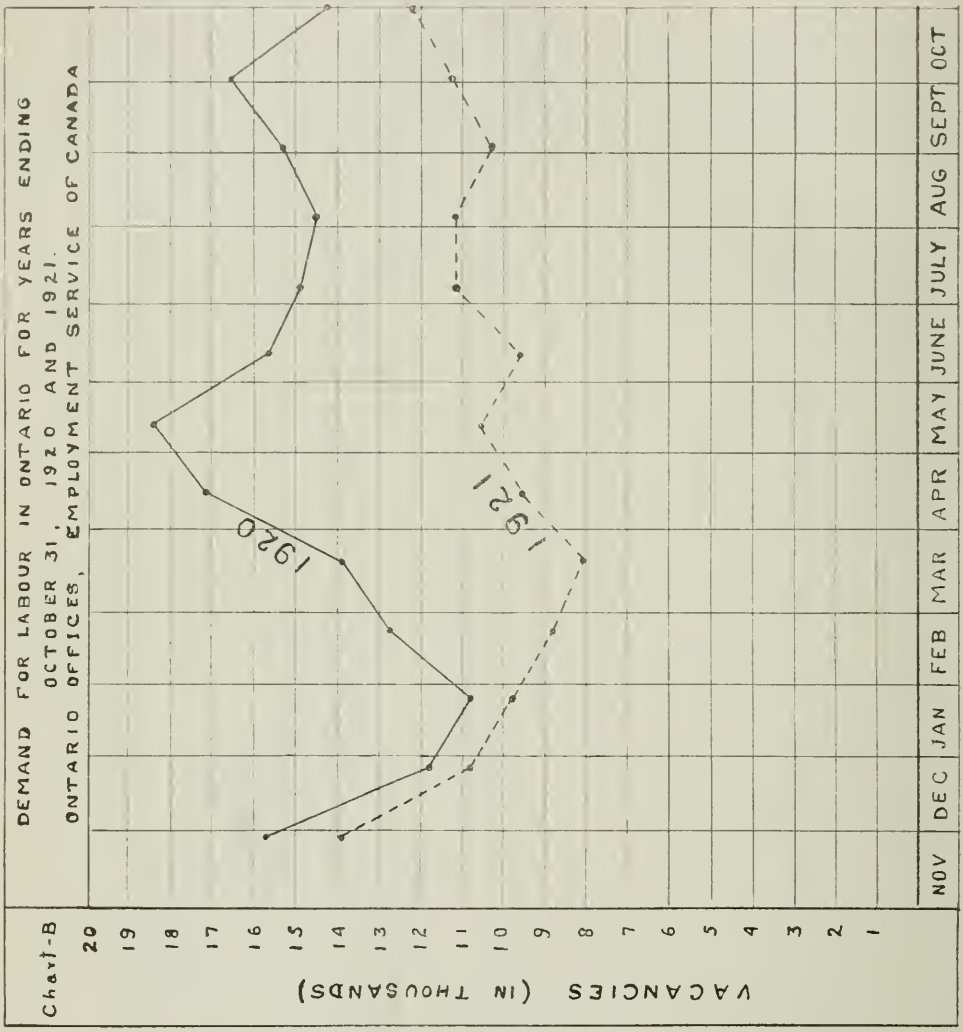


Chart-B
DEMAND FOR LABOUR IN ONTARIO FOR YEARS ENDING
OCTOBER 31, 1920 AND 1921.
ONTARIO OFFICES, EMPLOYMENT SERVICE OF CANADA
VACANCIES (IN THOUSANDS)
20
19
18
17
16
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1
NOV
DEC
JAN
FEB
MAR
APR
MAY
JUNE
JULY
AUG
SEPT
OCT
1920
1921

THE LABOUR MARKET IN ONTARIO, 1920-21.

The general labour situation during the two years ending October 31, 1921, as indicated in reports from the Ontario Offices of the Employment Service of Canada is shown graphically in Chart A, in which applications, vacancies and placements are plotted by four week periods.

The most significant of these curves is the one showing the trend of vacancies reported by employers. In brief, the demand for labour, after a short period of seasonal slackness during the winter of 1919-20, increased steadily during the spring of 1920, reaching a peak in May when 18,373 vacancies were reported for the four weeks ending May 14. From May 1920 to April 1921 there was a rapid and fairly steady decline, with the exception of September and October when there was an increase due largely to the early commencement of bush operations. From April until the end of October 1921 there was an alternate rise and fall in demand, but the general trend has been upward.

In Chart B the trends for the two fiscal years can be compared period by period. It will be noted that at no time during 1921 were as many vacancies reported as for the corresponding period in 1920. In fact it was not until October 1921 that the vacancies exceeded to any extent those of the lowest period of 1920, which was during the month of January.

A more detailed analysis of the decline from May 1920 to April 1921 shows that the depression was widespread. In the manufacturing group it is most noticeable in iron and steel and other metal products, lumber products, leather, rubber, textiles, pulp and paper. Building and construction work was very quiet. As previously stated the improvement in September and October 1920 was due largely to the early commencement of bush work, which was suddenly curtailed about the end of the year, throwing large numbers out of employment. The mining industries took the same course, many requests for importation of labour being received in the early fall of 1920, followed by great reductions in staffs during the winter.

A gradual increase in demand for labour from April to October 1921 was experienced in the manufacture of pulp and paper, lumber products, textiles and leather products. Bush operations during the fall of 1921, were on a small scale compared with those of 1920.

It will be seen from the placement curve that placements during the two years followed to a considerable extent the same trend as vacancies. During 1920, however, the two curves are widely separated, while in 1921 they almost coincide, indicating that during the latter period practically all vacancies reported to the Employment Service were being filled.

The application curve as a whole cannot be taken to indicate conditions as accurately as curves of vacancies and placements. For instance during the winter of 1920 the Federal Emergency Appropriation for the Relief of Unemployed Ex-Soldiers required "no-work" certificates from the Employment Service, which greatly increased the number of applications during that period. Similarily in 1921 the Unemployment Relief Scheme was probably responsible for many applications for work which would otherwise not have been received, as the majority of the municipalities participating in the relief plan required all applicants to register at the local office of the Employment Service.

TABLE V. COMPARISON BY FOUR-WEEK PERIODS OF THE ACTIVITIES OF THE ONTARIO OFFICES OF THE EMPLOYMENT SERVICE OF CANADA, DURING THE FISCAL YEARS 1920 AND 1921

1920–21	Applications for Work		Vacancies Notified		Placements					
					1921			1920		
	1921	1920	1921	1920	Regular	Casual	Totals	Regular	Casual	Total
Four weeks ending—										
November 27	18,892	12,812	13,992	15,782	9,288	1,459	10,747	8,865	1,486	10,351
December 25	15,156	12,742	10,772	11,896	6,476	783	7,259	6,785	1,088	7,873
January 22	17,208	21,188	9,709	10,910	5,476	1,892	7,368	7,582	911	8,493
February 19	16,345	16,713	8,772	12,782	5,408	1,423	6,831	8,108	1,255	9,363
March 19	12,782	15,728	8,001	13,979	4,572	1,638	6,210	8,141	1,302	9,443
April 16	11,852	14,627	9,624	17,236	5,576	1,755	7,331	10,011	1,373	11,384
May 14	13,109	13,891	10,565	18,373	6,607	2,186	8,793	10,110	1,622	11,732
June 11	11,258	12,659	9,589	15,791	5,726	1,737	7,463	9,421	1,308	10,729
July 9	13,216	13,874	11,157	14,974	7,274	1,897	9,171	9,888	1,576	11,464
August 6	13,724	13,953	11,125	14,523	7,347	1,763	9,110	10,326	911	11,237
September 3	13,644	13,685	10,361	15,333	7,036	1,852	8,888	10,054	1,317	11,371
October 1	13,647	13,716	11,116	16,540	6,916	2,464	9,380	9,879	1,416	11,295
October 31	15,113	13,743	12,075	14,213	6,863	2,350	9,213	9,565	1,552	11,117
Totals	185,946	189,331	136,858	192,332	84,565	23,199	107,764	118,735	17,117	135,852

EMPLOYMENT CLEARANCE

As one would expect, employment clearance activities during the twelve months ending October 31st., 1921 show a decline proportionate to the decline in the total number of placements as compared with the previous twelve months.

In 1920, clearance placements—that is to say, placements made outside the zones of the local offices—totalled 10,407. In 1921 the figure was approximately 35% lower, or 6,784. It is interesting to note, however, that the number of men sent to points outside the province in 1921 was 1,189, as compared with 1,120 in 1920. This is explained by the fact that the falling off in orders for bushmen in the Province of Quebec was offset by a special arrangement for the placement of Western Harvest workers through the Employment Service of Canada, in Sept. 1921. After the regular so-called Harvesters' Excursions had been run, there still remained a demand for workers in Northern sections of Alberta and Saskatchewan and this demand was met by the co-operation of Eastern and Western offices of the Employment Service, approximately 572 men being sent from the Province of Ontario.

The greatest volume of employment clearance business between different offices in Ontario was handled during the four weeks ending November 27, 1920 when 1,102 workers were transferred. The majority of these placements were made in connection with the lumbering and pulpwood cutting industries in the northern section of the province.

The Toronto Offices show the greatest activity in matters of clearance during the year, with 2682 transfers to other parts of the Province, and 642 transfers to other Provinces of the Dominion. Ottawa is second on the list with 1,187 intra-provincial and 414 interprovincial transfers. North Bay, the gateway to the mining district, shows 618 placements through the clearance system within Ontario, and 414 to other Provinces. Because of its strategic location from the point of view of lumbering, Pembroke sent 462 men to positions outside the Pembroke district.

Below will be found tables showing details of the Employment Clearance work.

TABLE VI. SUMMARY OF EMPLOYMENT CLEARANCE IN ONTARIO BY FOUR-WEEK PERIODS FOR YEAR ENDING OCTOBER 31, 1921

Period	Workers Transferred	
	Between Ontario Offices	To other Provinces
Four weeks ending:		
November 27	1,102	106
December 25	397	31
January 22	613	70
February 19	268	22
March 19	170	8
April 16	220	7
May 14	781	223
June 12	291	18
July 9	129	32
August 6	263	4
September 3	379	133
October 1	434	532
October 29	548	3
Totals	5,595	1,189

TABLE VII. CLEARANCE ACTIVITIES OF THE ONTARIO OFFICES FOR YEAR ENDING OCTOBER 31, 1921

	Workers Transferred	
	To other parts of Ontario	To other Provinces
Cobalt	202	.....
Fort William	2	11
Kingston	39	.....
Kitchener	81	.....
London	53	.....
Niagara Falls	61	.....
North Bay	618	75
Oshawa	1	.....
Ottawa	1,187	414
Pembroke	462	.....
St. Thomas	11	.....
Sault Ste. Marie	1	1
Sudbury	3	46
Timmins	8	.....
Toronto	2,682	642
Windsor	184	.....
Totals	5,595	1,189

Space does not permit a detailed description of the work done by each one of the twenty-five employment offices in the Province, but the report of the Toronto City Superintendent and Zone Clearance Officer, Capt. C. W. E. Meath is given in full on the following pages. It covers the operations of the most important office in the Province, if not the Dominion, and a study of its various activities reveals the extent to which a public employment service is linked up with many phases of community life and individual existence.

REPORT OF OPERATIONS CARRIED ON BY THE EMPLOYMENT SERVICE OF CANADA IN TORONTO

NOV. 1st, 1920, to OCT. 31, 1921.

The period from Nov. 1st, 1920 to Oct. 31st, 1921, was the hardest year in which the Employment Service has operated in this City. There were 81,419 individual applications for employment in the Toronto office, and 41,160 people referred to positions during the year. Business depression set in in the Fall of 1920, and continued throughout the entire year with the result that at no time did our number of unplaced applicants go lower than about 3,000, and at times the figure exceeded 15,000. The Employment Service has come through the most severe test possible and so far as Toronto is concerned, we feel that we are in a stronger position than ever before. This has been brought about by the co-operation of various organizations owing to the unemployment problem and by the centralization of employment work in this office in order that the situation might be efficiently handled.

The strain on our organization has been severe and we have been able to meet each contingency as it arose because of the earnestness and loyalty of the staff and the support of the various bodies with whom we have had to deal in this work. The co-operation of the Board of Trade, the Manufacturers' Association, the members of the Rotary Club, the U.F.O., the Neighborhood Worker's Association, the Welfare Section of the Department of Public Health, the Soldiers' Aid Commission, The G.W.V.A., the G.A.U.V., the Trades and Labor Council, Labor Unions, Army and Navy Veterans, Salvation Army, House of Industry, the Police Department, Social Service Council Church of England, have all helped us in meeting the conditions of distress which have been the result of the great unemployment prevailing during the year.

The number of vacancies dropped off during the Fall of 1920, and conditions became so bad that a system of relief was inaugurated whereby the Federal, Provincial and Municipal Governments each assumed one-third of the cost. The relief consisted of groceries, food and fuel to married people, and meal tickets to single men. The relief was furnished by a temporary staff operating at a building at the corner of King and Church Streets. The applicant first registered at our office for employment. If no employment was available, we furnished him with a relief card which entitled him to the relief. The responsibility for investigating each case was placed upon the Municipal Department of Health. Nurses visited the homes regularly and furnished the necessary information to the Relief Station and to this office, as to conditions there.

The chart which is shown in this report, (page 29) will show to what extent this relief was taken advantage of as the number of applicants for employment was at its peak during the operation of the relief.

The City also furnished relief work during the Winter of 1920-21. Over 800 men were employed in the parks for three days per week, and these men all came from this office. The extra work in connection with this and with the relief, was a serious strain on every member of the staff, but a spirit of cheerfulness and willingness existed and at no time were we unable to cope with the situation.

In the month of February 1921, a Handicap Section was formed. In May 1921, a Professional and Business Section was formed, and in August 1921, a Boy's Department. These are each referred to later in this report.

Manufacturing in Toronto during the past year has been very dull. The slump in rubber, metal and woollen industries resulted in the closing down of such large plants as Massey-Harris Co., Canadian Allis-Chalmers, Goodyear Tire Co., Dunlop Tire Co., and others. The building trades have been busy all summer, and since the taking over of the Street Railway by the Toronto Transportation Commission on Sept. 1st, 1921, about 2000 men have been engaged in relaying the tracks and roadbeds. However, this work as well as building, is drawing to a close as the cold weather sets in.

There has been a great falling off in the number of men employed for the bush this year as compared to former years. Last year $60 and $70 per month was offered and enough men could not be secured. This year from $26 to $32 for fully experienced men is offered and only a few picked men have been taken. The railways have done very little work and practically no relief has come from this source. There are so many men unemployed in the North that we have had little chance to get men out of Toronto to any construction work which has been in progress.

The textile and leather trades probably recovered sooner than any other lines and are fairly busy this Fall. Lumber products have been very dull and furniture factories have cut down their staffs considerably.

The farming industry felt the depression first and was probably as hard hit as any. The drastic drop in the price of farm products and the bad crops experienced in this district have placed the farmer in a position of uncertainty during the past season and as a result the wages paid farm help have been cut, as compared with the previous year. Our connection with the farmer in this Province is shown best by the figures following this report, but the co-operation of the farmers with this office has helped the situation in this city very materially.

We have lately issued a bulletin twice a month describing some of the applicants registered at this office. We send this to a list of about 200 employers in Toronto. Comments on this plan which have reached us from time to time show that employers did not realize the class of applicant who registers here. A good many had the idea that common labour was about the limit of our ability to help them. We have had splendid results from the issue of this bulletin and when times improve, I am sure this will prove to be an important feature of our business.

The policy we have pursued in connection with the building up of this service in Toronto, has been to give satisfaction to the employer. This is the only safe and permanent way to carry on our business and sending a man to a job just because the man needs work, is not satisfactory as the employer loses confidence in us. The applicant is always available but the job is not, and if we serve the employer well, we will have continued business from him and in this way alone can we help the applicant. We sometimes have unreasonable applicants who do not appreciate this and who demand that they be sent to certain jobs but we would rather have any trouble we must have with the applicant than

with the employer. Employers are seeing that by using a central Employment Office, waste is eliminated and they are furnished the best possible medium for obtaining high class help free of charge.

During the Spring of 1921, a very strong movement among returned soldiers for a separate Employment Office for ex-service men only, was started in Toronto but after some few weeks of conference etc., the matter was amicably settled and we now have the undivided support of all ex-service men's organizations.

One outstanding feature of the unemployment situation in the City of Toronto during the past year, has been the number of newly arrived immigrants principally from the industrial centres of the British Isles. These people flock to the cities and Toronto seems to have more than its share. There are a great many ex-Imperial soldiers in this class, who have come out from Great Britain under the Overseas Settlement scheme. They stay in Toronto and will not leave the city. There is also the immigrant who came out here to go on the land and did so for a short period, but at the first opportunity they come in to Toronto. This has been a serious problem to contend with. If these people could be moved out of the cities it would relieve matters. We do our best here to carry on a steady system of propaganda trying to induce these people to get out of the cities into the country, but it is most discouraging. However, we are succeeding in this work to some extent.

In addition to the actual work of employment, this office has been a centre for information of all kinds during a year of very distressing conditions. Immigrants arriving in Toronto come to the Employment office seeking all sorts of information. Ex-service men come here for information as to Pensions, etc., and we have made it a point to satisfy as far as possible, any enquiry on any subject pertaining to the work of the different Government Departments.

MEN'S INDUSTRIAL SECTION

In the Men's Industrial Section we had 40,155 applications and placed 9,907 in positions. There were 13,106 vacancies reported in this section. In the Spring of 1921, it was found that many large out-of-town construction jobs which we had been depending on to relieve the situation, did not materialize and this left a large supply of mechanics in the city. These men who could not secure work in their various trades, accepted such jobs as were available, handymen, labourers, etc.

The larger building and construction jobs in the City were the new King Edward Hotel, the Live Stock Arena, the rehabilitation of the Street Railway.

Employers have availed themselves of our Provincial Bulletin during the past year, and we have had many complimentary remarks on the service we render the public through our Clearance system.

The experiment tried out early in the summer of having one member of the staff report at the office at 7.45 a.m. in order to pick up early orders phoned in, has proved entirely successful and this early service is appreciated by applicants as well as employers.

There was a noticeable increase in the number of railway workers registered during the Fall of 1921, engineers, firemen, etc., having been laid off after years of steady service owing to general reductions of staffs.

A scheme was worked out whereby members of the staff of this Section visited a number of industries from time to time, in order that they might see the actual conditions under which people are employed and in this way be able to act intelligently on an order when received from manufacturers. This proved an efficient plan of educating our placement officers.

MEN'S PROFESSIONAL AND BUSINESS SECTION

The Professional and Business Section was organized on May 1st, 1921, in order that men able to fill the higher class positions in organized business, should be given the proper attention in this office. A better standard of jobs coming into this office has been the result, and in normal times we are prepared to function efficiently on the higher type of worker who did not visit the office formerly because no hope was offered to him in his search for employment. The Bulletin which we issue every two weeks has helped this Section probably more than any other. The vacancies at present being offered are mostly for salesmen on a commission basis, but we have had a great demand for male stenographers and bookkeepers combined. This last has been due to employers laying off a male bookkeeper and female stenographer and employing one male to do the work. This has occurred frequently during the past few months.

To give an idea of the class of men we are placing, the following are some of the placements made:—

Assistant Superintendent at	$4,200 per annum.
Efficiency Expert at	3,750 per annum.
Gas Plant Superintendent at	3,250 per annum.
Salesmen at	2,600 per annum.
Mechanical Engineer at	2,000 per annum.

CIVIL SERVICE SECTION

The Civil Service Section has now been discontinued owing to the action of the Federal Civil Service Commission in taking this work out of our hands. During the short time the Section was in operation, we had 719 applications and placed 190 in the various Federal Departments in Toronto. We have had the assurance of the Post Office, the Customs House, the Inland Revenue Office, the Income Tax and the Public Works Departments, that our efforts were most satisfactory and efficient during the time the Employment Service had this work in hand.

MEN'S FARM SECTION

This Section was very busy during the past year. The great amount of unemployment in the City forced men with farm experience to look for outside work, with the result that we had 6,786 applications and placed 5,695. The severe drop in wages during the year made it a hard matter to explain to men seeking farm work, that the farmer was up against a hard proposition in the greatly decreased prices which he received for his products. Experienced men were getting $35 to $40 per month during the past summer, and the average winter wage will be about $20 to $25 per month. A great number of newly arrived immigrants were placed through this office.

HEAVY LABOUR OUT-OF-TOWN SECTION

The number of applicants during the year have been; Labour, 3,838, Bush, 1,276, and the number of placements: Labour, 3,231, Bush, 1,054. On account of the Hydro completing their work at Niagara, the small amount of track work done by the railways, and practically no lumber mills running, this Section has

been severely handicapped. Our chief clients during the past year have been the Hydro Electric Power Commission, Department of Highways, Canadian National Railway, Canadian Pacific Railway, Spanish River Lumber Company, R. B. Herron Lumber Company, Mickle Dyment Company, Graves Bigwood Company, etc.

MEN'S HANDICAP SECTION

This Section has been in operation since April, and has a total registration of 500 men, divided roughly as follows:—

Injuries to legs and arms	230
Medical	120
Old age	65
Weak sight or hearing	35
Mental cases	50

We have been assisted in this work by the Association of Mental Hygiene who have diagnosed our Mental Cases and the Provincial Department of Health who have diagnosed a great many of our Medical Cases. Experience shows that a great majority of these handicaps have already received the best medical treatment obtainable through hospitals or other institutions, and that the problem of the handicapped men is industrial and not medical.

From an industrial point of view the outstanding fact is that 60% of our handicapped men are unskilled labourers who can no longer do labourers' work, and training in some suitable occupation seems the only solution to the problem. A detailed study of each handicapped case would be the necessary preliminary to any system of retraining, but this Section, at the present moment, does not possess the necessary facilities for such work.

Situations for handicapped men are very difficult to obtain at any time, but it is a hard problem at such a time of general unemployment as at present. Altogether we have referred 86 cases to positions since opening the Section.

BOYS' SECTION

Ever since the Provincial Employment Bureau commenced operations, the boys between 14 and 18 years have been grouped with the men under their respective occupations. This method has been found unsatisfactory because of the general industrial inexperience of boys of these ages. The boys also felt out of place and neglected. A separate section for these boys was started Sept. 10th, 1921, with a registration of 25 boys. After we had transferred our boys' cards from other sections and with additional registrations we have on Oct. 31st, about 400 boys registered. The results of this experiment have been very satisfactory and there is every indication that a Juvenile Section will be successful and useful in the Employment Service.

WOMEN'S INDUSTRIAL AND CLERICAL SECTION

There were 893 placed in the Women's Industrial Section during the past year. In spite of the depression throughout the year the placements were 200 more than the previous year; 375 different factories placed orders with this Section.

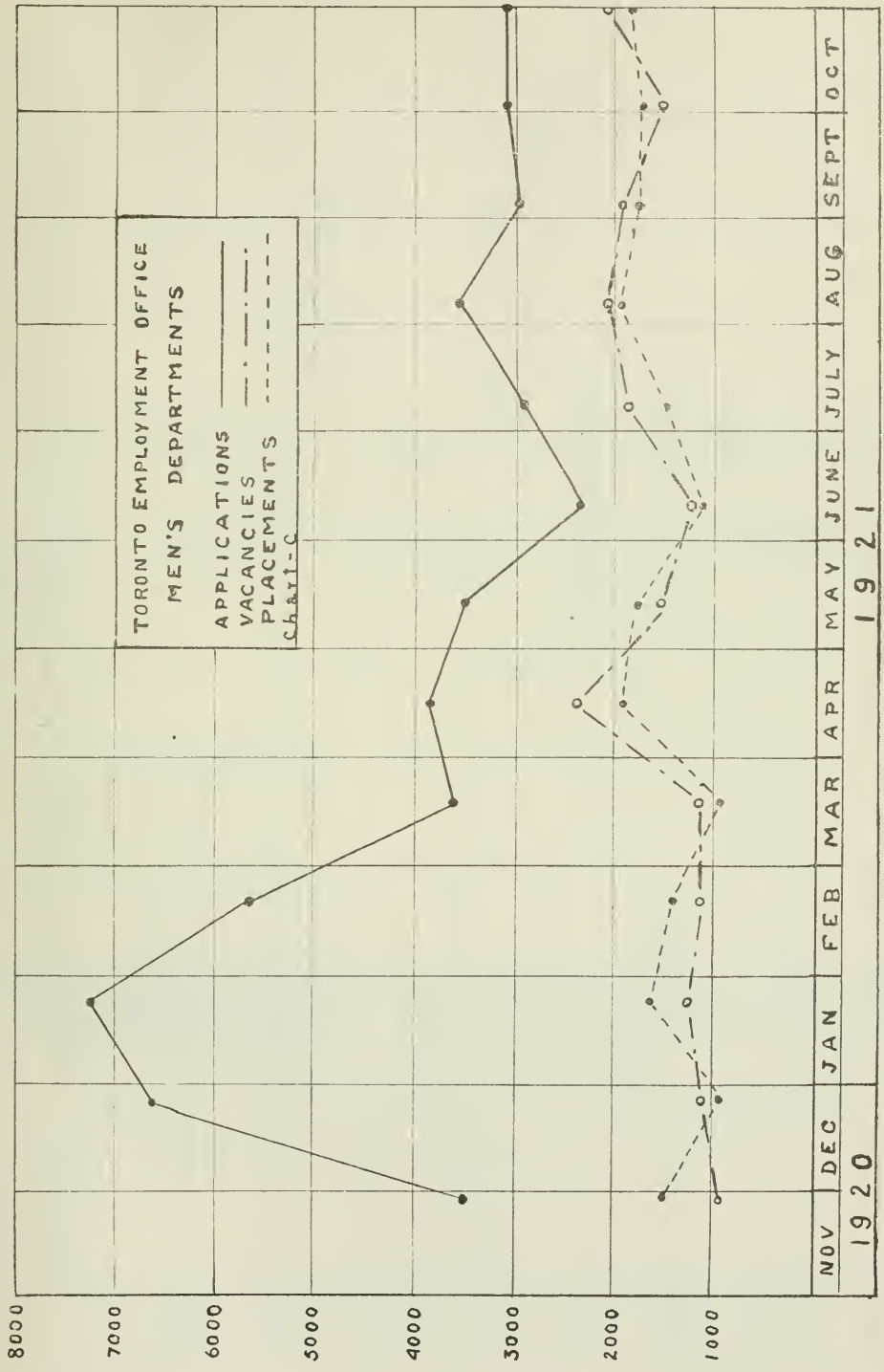
There were 1,554 placed in the Women's Clerical Section. 485 different offices placed orders with the Section. Besides stenographers, bookkeepers, clerks, etc., fourteen women with University standing or special training were placed in positions which were classified as "Professional" with initial salaries ranging from $1,000 to $1,500 per annum.

WOMEN'S FARM SECTION

413 Women were placed in this Section. Fourteen applications for camp permits for fruit farms were received and dealt with. Each camp was inspected.

WOMEN'S HOUSEWORKERS' SECTION

Permanent placements in this Section for the year were 2,938 as compared with 1,997 for the year before. Casual placements were 11,843. The situation at present shows that the demand for cook-generals cannot be met, and the need of a training school for this class of worker is very great. Employers refuse to take factory workers into their homes to train them as house-workers. During the year 250 British houseworkers have been placed. Some of these paid their own passage from Britain and some war-workers were granted transportation. While it is our policy to try to induce immigrants of the houseworker's class to remain in Canada, yet it is certain that a number of them go on to the United States as soon as their legal term expires. Some have admitted that they have endeavoured the join their friends there before the year was up, but were turned back at the border.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MEN'S DEPARTMENTS
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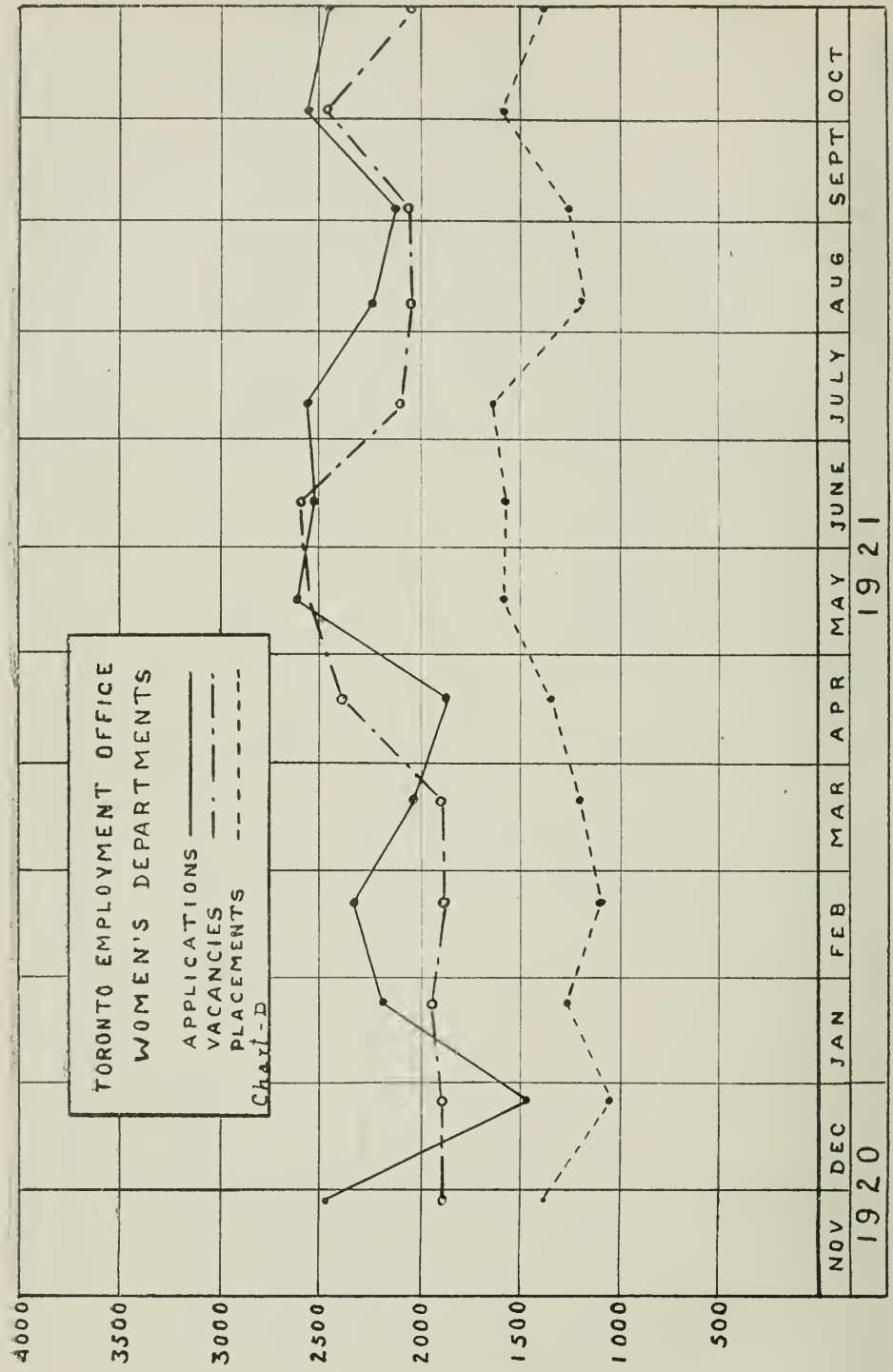
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WOMEN'S DEPARTMENTS
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CENTRAL ONTARIO CLEARANCE SECTION

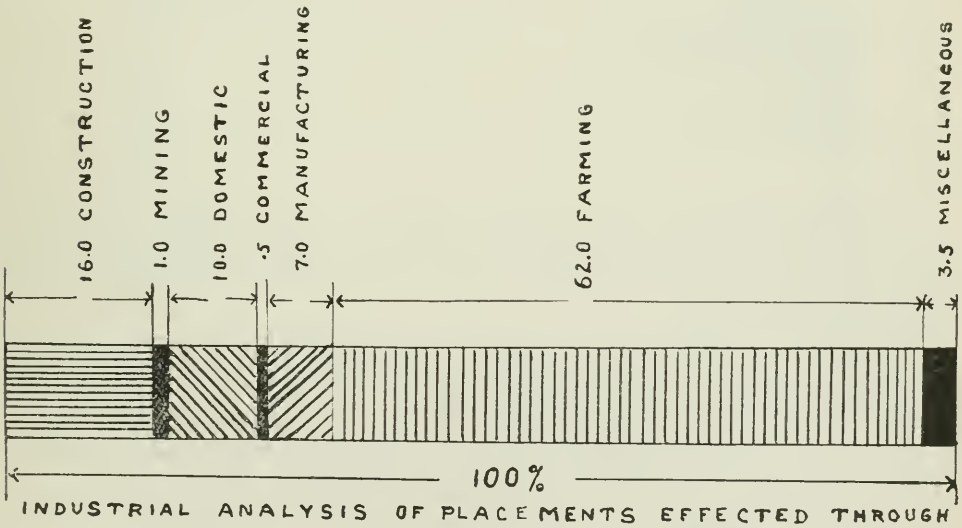
The Clearance Section has worked quite efficiently during the past year and is one of the sections of the Empoyment Service which is thoroughly appreciated by the employer. The number of men cleared for outside trade has been small compared with the previous year, the reason being that work at the pulp mills, lumber camps and general construction has been very dull.

In connection with persons transferred to the summer hotels and resorts, it sometimes occurs that where people have been satisfactory the previous year, the employer engages these people direct, without reference to our office and in this way a number of orders are lost to us.

A complete chart follows, showing the relative proportions of the different groups dealt with through Clearance.

NEW SYSTEM OF REGISTRATION

During the past few months we have gone through our files and cancelled any duplications in our registrations. We have thoroughly rearranged our filing system so that there will be no duplications. When a new applicant approaches the registration desk we look for his name in the alphabetical file no matter whether he says he is registered or not, and in this way prevent any new duplicate registrations. This will make our records more accurate and information secured from the office will be more reliable. The registration cards are also made out in detail and more care is also given the filling out of the employer's request cards.



INDUSTRIAL ANALYSIS OF PLACEMENTS EFFECTED THROUGH CLEARANCE BY THE TORONTO OFFICE, 1921.

Chart-E

CONCLUSION

In conclusion, I wish to call attention to the faithful service rendered by the members of the staff of the Employment Service of Canada in Toronto. There is no other public work as hard on the nerves or bodies of Civil Servants as this work during the past year. The constant strain of not only the employment work, but the unrest and unsettled state of affairs which has to be combatted

every day in this office, is a severe test on the efficiency of the staff here. Business men visiting the office have remarked on the cheerfulness of the members of the staff and the constant and effective work which is done in assisting to meet a situation such as the country has never known before.

C. W. E. MEATH,
Superintendent of Toronto Office.

UNEMPLOYMENT RELIEF

During the year fifteen municipalities in Ontario participated in the Federal Government's plan for relief due to unemployment. Excluding Toronto, 5,516 cases were assisted by the government for periods ranging from a few days up to about three months. In Toronto 4,830 cases were taken care of between January 15 and April 12, making a total of 10,346 cases reported for the Province. In table VIII will be found a list of the municipalities which found it necessary to undertake relief, also the extent of the work.

TABLE VIII

Municipality	Number of Cases
Brantford	301
Cobalt	7
Etobicoke Township	85
Hamilton	3,899
North Bay	3
Oshawa	178
Paris	5
Port Arthur	173
Peterboro	139
Scarboro Township	...
St. Catharines	124
Stratford	114
*Toronto	4,830
York Township	441
Windsor	47
	10,346

* January 15 to April 12, 1921.

An analysis of relief cases in those places from which complete data could be secured is presented in the tables which follow. As only partial information could be obtained for Toronto, Port Arthur and Stratford, these places are not included in the analysis.

In table IX. 5,229 applicants for relief are classified according to country of birth. Of these 1,847 or 35.3 per cent. were Canadian born while 48.8 per cent. were from the British Isles, divided as follows:—

TABLE IX. ORIGINS OF RELIEF APPLICANTS

Origins of Ontario Population		Relief Cases	
Country of Birth	Percentage	Number	Per cent. of Total
Canada	79.9	1,847	35.3
England	9.2	1,933	37.0
Scotland	2.6	480	9.2
Ireland	2.0	137	2.6
United States	2 2	57	1.1
Continental Europe	3.4	654	12.5
Other countries	.7	121	2.3
	100.0	5,229	100.0

It will be seen that 37.0 per cent. were from England, 9.2 per cent. from Scotland and 2.6 per cent. from Ireland. About 15 per cent. had their origin in non-English speaking countries, 12.5 per cent. being from Continental Europe.

Although slightly over one-third of the relief cases were those of Canadian born, the number per unit of population was relatively small. Relief cases were much more numerous among our British born population, nearly 50 per cent. coming from this group, which constitutes only about 14 per cent of our population. A considerable number of those other than Canadian born were recent immigrants, 587 being in Canada less than one year, which means that they arrived about the time the industrial depression was setting in and were not in a favourable position to cope with unemployment.

The fact that so many of the British born required relief is also partially accounted for by the fact that many of them have set up homes for themselves in the suburbs of the cities. They have been striving to become owners of their homes and the advent of unemployment soon brought them to the limit of their financial resources. This condition was particularly evident in York Township where two-thirds of the relief cases were English, Irish or Scotch.

In table X the relief cases are grouped according to the number of years they have lived in Canada. The small number of cases from two to six years is accounted for by the small amount of immigration during the war period.

TABLE X

Number of Years in Canada	Number of cases
Life	1,847
1	586
2	120
3	22
4	35
5	36
6	24
7	122
8	262
9	317
10	345
Over 10	1,513
	5,229

In table XI the relief cases are classified according to the usual occupation of the applicants. It will be noted that almost 50 per cent belong to the unskilled labour group while only 25 per cent were formerly employed in some line of manufacturing, and this during a period when factory work was very scarce.

TABLE XI

Occupations	Number	Per cent. of Total
Building	459	8.8
Commercial	117	2.2
Personal Service	186	3.6
General Labour	2,575	49.2
Manufacturing	1,317	25.2
Technical	13	.3
Railway construction and operations	11	.2
Farming	16	.3
Miscellaneous	535	10.2
	5,229	100.0

These figures would indicate that the unskilled worker is not in as good a position to meet an industrial depression as those who have learned a definite trade or occupation. The operation of the Adolescent School Attendance Act will tend to reduce the number who ultimately find themselves in this group. One method of attacking the problem at its source would appear to be along educational lines, and the co-operation of schools and industry should be utilized to the fullest extent to lead boys into the line of work for which they are best adapted. This function could probably be performed best through the medium of a juvenile Employment Service.

DURATION OF RELIEF

Whenever relief was applied for the case was investigated and the applicant was obliged to secure a certificate from the local office of the Employment Service of Canada (or from some local organization) to show that employment was not available. When relief was in the form of provisions, only one week's supply was granted at a time. Further requests had to be accompanied by a certificate of unemployment.

TABLE XII

Number of weeks	Number of cases	Per cent. of cases
1	1,935	37.0
2	768	14.7
3	555	10.6
4	389	7.5
5	297	5.7
6	220	4.2
7	216	4.1
8	169	3.2
9	151	2.9
10	121	2.3
Over 10	408	7.8
	5,229	100.0

It will be seen from table XII that only a small number of cases received assistance over long periods, over 50 per cent. being for two weeks or less, while 37 per cent. were aided only once. This is accounted for by the equitable distribution, through Government offices and local relief organization, of any available work.

On the following page will be found tables showing the country of birth of heads of families assisted, their occupations, duration of relief and length of time in Canada of those who are not of Canadian birth.

The following tables show the country of birth of heads of families assisted, their occupations, duration of relief and length of time in Canada of those who are not of Canadian birth.

TABLE XIII. ORIGIN OF FAMILIES RECEIVING RELIEF

Municipality	Country of Birth												
	Canada	England	Ireland	Scotland	Italy	Austria	United States	Russia	Poland	France	Roumania	Other Countries	Totals
Brantford	129	124	5	15	8	2	2	3	4			9	301
Cobalt	5	2											7
Etobicoke Township	38	36	3	6						1		1	85
Hamilton	1,355	1,316	109	390	283	58	46	91	122		34	62	3,899
North Bay	2	1											3
Oshawa	65	66	1	8		9	3	4	11		11		178
Paris	3	1	1										5
Peterborough	79	49	1	6	3					1			139
St. Catharines	53	51	5	10	1		1					3	124
Windsor	20	15	2	7			1			1		1	47
York Township	98	242	10	38	3		4	3				43	441
Totals	1,847	1,933	137	480	298	69	57	104	138	2	45	119	5,229

TABLE XIV. OCCUPATIONS OF RELIEF APPLICANTS

Municipality	Shipping and Longshore	Building and Construction	Commercial and Clerical	Domestic and Personal	General Labour	Manufacturing				Miscellaneous	Number of families Assisted
						Foods	Leather	Metals	Textiles		
Brantford	2	10	7	8	137	1	1	87	7	41	301
Cobalt					1			4		2	7
Etobicoke Twp.	2	7		4	25			17		30	85
Hamilton	19	331	89	147	1,907	65	22	744	100	475	3,899
North Bay		2	1								3
Oshawa		20	4	6	103		1	26	1	71	178
Paris					4			1			5
Peterborough		9	1	5	89	1		21	3	10	139
St. Catharines	1	13	2	8	54	3		19		24	124
Windsor		5	4	1	21			8		8	47
York Township		62	9	7	234	5	1	42	4	77	441
	24	459	117	186	2,575	75	25	969	115	684	5,229

TABLE XV. DURATION OF RELIEF

Municipality	1 week	2 weeks	3 weeks	4 weeks	5 weeks	6 weeks	7 weeks	8 weeks	9 weeks	10 weeks	Over 10 weeks	Number of families assisted
Brantford	127	44	41	22	13	9	7	8	14	3	13	301
Cobalt	2	.....	1	1	.....	.....	1	1	.....	.....	1	7
Etobicoke Township	29	12	8	7	5	10	8	2	2	.....	2	85
Hamilton	1,308	526	394	295	245	177	193	151	122	111	377	3,899
North Bay	1	.....	1	.....	.....	.....	.....	1	.....	.....	.....	3
Oshawa	82	33	28	20	5	5	1	1	2	1	.....	178
Paris	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5
Peterborough	33	24	17	14	10	10	6	3	7	3	12	139
St. Catharines	74	23	12	8	.....	4	.....	.....	.....	3	.....	124
Windsor	28	12	7	.....	.....	.....	.....	.....	.....	.....	.....	47
York Township	246	94	46	22	19	5	.....	2	4	.....	3	441
Totals	1935	768	555	389	297	220	216	169	151	121	408	5,229

TABLE XVI. NUMBER OF YEARS SPENT IN CANADA BY RELIEF APPLICANTS

Municipality	Life	1 year	2 years	3 years	4 years	5 years	6 years	7 years	8 years	9 years	10 years	11 years	12 years	13 years	14 years	15 years	Over 15 years	Total Applicants
Brantford	129	33	8	2				5	11	10	24	8	14	4	13	11	29	301
Cobalt	5													2				7
Etobicoke Twp.	38	3	1					2	7	5	4	5		1	1	5	13	85
Hamilton	1,355	481	94	15	31	34	19	106	202	246	241	246	100	86	98	108	437	3,899
North Bay	2																1	3
Oshawa	65	10	3	2	1		2	1	8	8	22	10	2	4	12	15	13	178
Paris	3																2	5
Peterborough	79	8	2		1			2	3	8	1	9		2	6	2	16	139
St. Catharines	53	12	4	2					9	3	6	4	3			4	24	124
Windsor	20	5					1	1	2	6		2	1		1	2	6	47
York Twp.	98	34	8	1	2	2	2	5	20	31	47	34	15	10	20	24	88	441
	1,847	586	120	22	35	36	24	122	262	317	345	318	135	109	151	171	629	5,229

EMPLOYMENT AGENCIES ACT

In 1914 there were 98 private employment agencies in Ontario. In 1921 the number had been reduced by the competition of the Ontario offices of the Employment Service of Canada and by legislative restriction to 16. Of this number, 4 were nurses' registries, operating in Toronto and filling a need not met up to the present time by any branch of the Employment Service.

During the year ending October 31, there were no convictions under the Employment Agencies Act. A number of complaints were investigated and adjustments brought about by departmental officials.

Two agencies were closed voluntarily by the license holders, those of J. Andrecjzuk of Sudbury and J. Warnock of Arnprior.

Below will be found a complete list of the licensed Employment Agents in Ontario as at October 31st, 1921. No other agencies or persons are authorized to receive or demand any fee, reward or other remuneration for any assistance they may render in the matter of placing men or women in employment.

J. T. Reid—104 Simpson St., Fort William.
J. B. Weller—North Bay (Box 353).
B. Ferro—North Bay.
P. H. Wright—160 Canal St., Ottawa.
Alex. Emond—Mattawa.
J. C. Stewart—192 Park St., Port Arthur.
A. St. Denis—Sudbury, Ontario (Box 654).
A. E. Woods—Sudbury.
Misses Buckingham & Boyle—158 Cumberland, Toronto.
G. C. Burnham—66 Church St., Toronto.
Miss E. M. McMullen—233 Robert St., Toronto.
Miss A. Geldard—159 Madison Ave., Toronto.
H. A. Lay—Room 40, Yonge St. Arcade, Toronto.
R. Verity—169 Simcoe St., Toronto.
R. C. Wood—190 King St., Toronto.

STATIONARY AND HOISTING ENGINEERS

Board—J. M. Brown, Chairman; G. W. Porter, W. Corrigan, Assistants to the Board.

"A"

Number of Stationary Engineers' Certificates granted for the fiscal year ending October 31st, 1921		10,795
Made up as follows:		
Candidates who qualified by examination (Fourth-Class)	1,002	
(fees deposited previous to year 1921—13 @ $5		
" " " 2 @ $3)	153	
Candidates who qualified by examination (Third-class)	180	
(fees deposited previous to year 1921—13 @ $5		
" " " 5 @ $3)	18	
Candidates who qualified by examination (Second-class)	79	
" " " " "		
(fees deposited previous to year 1921—3 @ $5)	3	
Candidates who qualified by examination (First-class)	23	
" " " " "		
(fees deposited previous to year 1921—3 @ $10)	3	
Candidates who qualified by Provisional Certificates:		
(Fourth-class) 6		
(Third-class) 4		
(Second-class) 7		
—	17	
Candidates who qualified by renewal fee @ One dollar:		
(Fourth-class)	666	
(Third-class)	4,981	
(Second-class)	3,401	
(First-class)	37	
" " "		
(fees deposited previous to year 1921)—		
(Third-class)	73	
(Second-class)	4	
Candidates who qualified by renewal fee @ Five dollars:		
(Fourth-class)	9	
(Third-class)	134	
(Second-class)	8	
" " " " "		
(fees deposited previous to year 1921)—		
(Third-class, 3 @ $5		
1 partial fee @ $1.00)	4	
Total		10,795

Number of Hoisting and Portable Engineers' Certificates granted for the fiscal year ending October 31st, 1921		2,086
Made up as follows:		
Candidates who qualified by examination (Hoisting)	269	
" " " " "		
" " " (fees deposited previous to year 1921—70 @ $3)	70	
Candidates who qualified by examination (Portable)	18	
Candidates who qualified by Provisional Certificates (Hoisting)	2	
Candidates who qualified by renewal fee @ One dollar (Hoisting)	1,683	
Candidates who qualified by renewal fee @ Five dollars (Hoisting)	43	
" " " " " " " "		
" " " ($2 of fee deposited previous to year 1921)	1	
Total		2,086

"B"

Total number of Certificates refused during the fiscal year ending October 31st, 1921		311
Made up as follows:		
Stationary Engineers' (Fourth-class)	47	
Stationary Engineers' (Third-class)	105	

Stationary Engineers' (Second-class)	75	
Stationary Engineers' (First-class)	13	
Total		240
Hoisting Engineers'	61	
Portable Engineers'	10	
Total		71
Grand Total		311

(Causes for refusal being low percentage in examination.)

Number of certificates withheld:

(Fourth-class) 2
(Candidates could not comply with the Dominion Naturalization Act.)

(Fourth-class) 1
(Candidate under age required by the Act.)

"C"

During the fiscal year 1921, there was one Fourth-class Stationary Engineers' Certificate cancelled, (candidate being under age required by the Act.)

"D"

Amount of Stationary Engineers' fees deposited during the fiscal year ending October 31st, 1921: (Including Plant Owners' Registration fees).

November, 1920	$ 1,304 10	
December, 1920	5,444 15	
January, 1921	5,363 64	
February, 1921	1,431 20	
March, 1921	1,044 35	
April, 1921	762 50	
May, 1921	605 00	
June, 1921	842 00	
July, 1921	503 00	
August, 1921	630 00	
September, 1921	820 00	
October, 1921	602 15	
Difference on exchange on British Postal Order, 4s, (John R. Armstrong)	04	
	$19,352 13	
Less Stationary Engineers' fees transferred to Hoisting Engineers' fees (see folio 499 Stationary Engineers' Cash Book)	49 00	
	$19,303 13	
Plus Hoisting Engineers' fees transferred to Stationary Engineers' fees (see folio 498 Hoisting Engineers' Cash Book)	22 00	
Total		$19,325 13

Made up as follows:

897	Examination fees	(Fourth-class)	@ $5		$4,485 00
1	Balance of examination fees	(Fourth-class)	@ $5		2 00
365	Examination fees	(Fourth-class)	@ $3		1,095 00
2	Re-examination fees	(Fourth-class)	@ $1		2 00
6	Examination fees (Certificates issued previous to year 1921)	(Fourth-class)	@ $5		30 00
13	Balances of examination fees (Certificates issued previous to year 1921)		@ $2		26 00
344	Examination fees	(Third-class)	@ $5		1,720 00
3	Examination fees	(Third-class)	@ $3		9 00
7	Re-examination fees	(Third-class)	@ $3		21 00
1	Examination fee (Certificate issued previous to year 1921)	(Third-class)	@ $5		5 00
2	Balances of examination fees		@ $3	6 00	
1	Balance of examination fee (Certificates issued previous to year 1921)		@ $2	2 00	8 00

138	Examination fees	(Second-class)	@	$5	$ 690 00
21	Examination fees	(Second-class)	@	$7	147 00
43	Examination fees	(First-class)	@	$10	430 00
1	Examination fee	(First-class)	@	$10	10 00
	(Certificate issued previous to year 1921)				
4	Re-examination fees	(First-class)	@	$5	20 00
2	Re-examination fees	(First-class)	@	$7	14 00
3	Duplicate Certificate fees	(Fourth-class)	@	$1	3 00
5	Duplicate Certificate fees	(Third-class)	@	$1	5 00
3	Duplicate Certificate fees	(Second-class)	@	$1	3 00
2	Duplicate Certificate fees		@	$1	2 00
	(Plant Owners' Registration)				
6	Provisional Certificate fees	(Fourth-class)	@	$5	30 00
4	Provisional Certificate fees	(Third-class)	@	$5	20 00
7	Provisional Certificate fees	(Second-class)	@	$5	35 00
666	Renewal fees	(Fourth-class)	@	$1	666 00
4981	Renewal fees	(Third-class)	@	$1	4,981 00
3	Renewal fees	(Third-class)	@	$1	3 00
	(Certificates issued previous to year 1921)				
3401	Renewal fees	(Second-class)	@	$1	3,401 00
37	Renewal fees	(First-class)	@	$2	74 00
8	Renewal fees	(Fourth-class)	@	$5	40 00
1	Renewal fee (balance of	Fourth-class)	@	$5	2 00
133	Renewal fees	(Third-class)	@	$5	665 00
1	Renewal fee (balance of	Third-class)	@	$5	3 00
1	Renewal fee	(Third-class)	@	$5	5 00
	(Certificate issued previous to year 1921)				
1	Renewal fee (balance of	Third class)	@	$5	4 00
	(Certificate issued previous to year 1921)				
7	Renewal fees	(Second-class)	@	$5	35 00
1	Renewal fee (balance of	Second-class)	@	$5	3 00
625	Plant Owners' Registration Certificate fees		@	$1	625 00
4	Plant Owners' Re-registration Certificate fees		@	$1	4 00
Surplus cash remitted with fees throughout the year 1921					2 13
Total					$19,325 13

Amount of Hoisting and Portable Engineers' fees deposited during the fiscal year ending October 31st, 1921:

November, 1920,	$ 855 25
December, 1920,	658 00
January, 1921,	374 00
February, 1921,	177 00
March, 1921,	179 00
April, 1921,	195 00
May, 1921,	103 00
June, 1921,	171 00
July, 1921,	150 00
August, 1921,	152 00
September, 1921,	191 00
October, 1921,	138 00
	$ 3,343 25
Less Hoisting Engineers' fees transferred to Stationary Engineers' fees (see folio 498 Hoisting Engineers' Cash Book)	$ 22 00
	$ 3,321 25
Plus Stationary Engineers' fees transferred to Hoisting Engineers' fees (see folio 499 Stationary Engineers' Cash Book)	$ 49 00
Total	$ 3,370 25

Made up as follows:

346	Examination fees (Hoisting)	@	$3		$ 1,038 00
1	Examination fee (Hoisting) (balance of)	@	$3		2 00
70	Examination fees (Hoisting)	@	$5		350 00
1	Examination fee (Hoisting) (supplementary)	@	$1		1 00
11	Examination fees (Portable)	@	$5		55 00

11	Duplicate Certificate fees (Hoisting) .....@	$1		11 00	
1	Provisional Certificate fee (Hoisting) ....@	$1		1 00	
1	Provisional Certificate fee (Hoisting) .....@	$5		5 00	
1683	Renewal fees (Hoisting) .....@	$1		1,683 00	
1	Renewal fee (Hoisting) certificate issued previous to year 1921			1 00	
43	Renewal fees (Hoisting) .....@	$5		215 00	
1	Renewal fee (Hoisting) .....@	$5 (Balance)..		3 00	
1	Renewal fee (Hoisting) certificate issued previous to year 1921			5 00	
Surplus cash remitted with fees throughout the year				25	
Total .....$			3,370 25		
Total amount of cash deposited .....$			22.865 78		

Made up as follows:

Stationary Engineers' fees (including Plant Owners' Registration Certificate fees) .....$	19,325 13	
Hoisting and Portable Engineers' fees	3,370 25	
Fees held on Suspense File from year 1909 to year 1917 (remitted without signatures or addresses of applicants; also surplus fees returned to applicants which were returned to office "unclaimed") as per entry folio 294 Stationary Engineers' Cash Book	84 00	
Fees held on Suspense File from year 1918 to year 1921 (unclaimed, as above mentioned, as per entry folio 322 Stationary Engineer's Cash Book)	55 00	
Per entry folio 329 Stationary Engineers' Cash Book	31 40	
Grand total		$ 22.865 78

"E"

5.	Number of Stationary steam plants registered during the fiscal year ending October 31st, 1921 625		
	Number of plants re-registered 4		
	Total		629
6.	Amount of fees received and deposited (Plant Owners' Registration Certificate fees).....		$629 00
7.	Number of candidates for examination examined by the Board of Examiners during the fiscal year ending October 31st, 1921, ...		2,058
	Made up as follows:		
	Stationary Engineers (Fourth-class)	1,117	
	Stationary Engineers (Third-class)	282	
	Stationary Engineers (Second-class)	140	
	Stationary Engineers (First-class)	41	
	Hoisting Engineers	434	
	Portable Engineers	44	
	Total		2,058

INSPECTION OF FACTORIES, SHOPS AND OFFICE BUILDINGS

Chief Inspector: James T. Burke.

Office: Spadina House, Spadina Crescent, Toronto.

DISTRICT INSPECTORS

R. Albrough, 25 Grosvenor Ave., Sault Ste. Marie: Mr. Albrough's district is west to the Manitoba boundary line: east, including Manitoulin Island, Sudbury and North Bay to Quebec boundary line.

G. H. Bostock, 87 Glebeholm Blvd., Toronto: Mr. Bostock's district is old C.P.R. lines east to Sharbot Lake: G.T.R. lines north including Peterborough but excluding North Bay.

H. Bourne, 57 Francis St., Hamilton: Mr. Bourne covers all districts in the Province of Ontario for the purpose of investigating foundries.

W. T. E. Brennagh, 221 Maple Ave., Hamilton: Mr. Brennagh's district is G.T.R. main line west to London (exclusive); east to Niagara Falls ,south and east of London and Port Stanley lines; north C.P.R. and G.T.R. to Crumlin and Tavistock, but exclusive of Milton, Branchton and Ingersoll Junction.

H. A. Clark, 238 Dufferin St., Toronto: Mr. Clark's district is City of Toronto, east side of Yonge St., and west of Don River; north, including Leaside and South including a portion of Toronto Island.

W. S. Forster, 336 McLeod St., Ottawa: Mr. Forster's district is east of North Bay, Algonquin Park and K. & P. Railway.

Miss Hamilton, 225 Bagot St., Kingston: Miss Hamilton's district is Kingston, K. &. P. Railway, north and east to the Quebec boundary line.

A. W. Holmes, 39 Lakeview Ave., Toronto: Mr. Holmes' district is City of Toronto, east and south of Lansdowne Ave. and Bloor St., west to Burlington, north to city limits; east including York St., University Ave. and Avenue Road; south, including a portion of Toronto Island.

R. Hungerford, 434 Shaw St., Toronto: Mr. Hungerford's district is City of Toronto, west of, but including Lansdowne Ave. and Bloor St., also West Toronto, Lambton, Milton, Branchton, but excluding Drumbo, Stratford, Gowanstown and Fordwich: north to Southampton, Bruce Peninsula, Owen Sound, Collingwood, Meaford, Penetanguishene, and both C.P.R. and C.N.R. lines including Orillia and Elmvale but excluding Sudbury.

S. J. Mallion, 74 St. Vincent St. Stratford: Mr. Mallion's district is Fordwich, Gowanstown, Stratford, St. Mary's, London, St. Thomas, and Port Stanley: south and west to border line, including Ingersoll Junction on the C.P.R. and North, including Teeswater, Kincardine, and Goderich.

Miss Ogilvie, 118 Centre St., St. Thomas: Miss Ogilvie's district is Port Dover, Simcoe, Woodstock, Tavistock, Listowel, Teeswater, west, south and north to Lakes Huron and Erie, and River St. Clair.

Mrs. Reddick, 437 Crawford St., Toronto: Mrs Reddick's district is City of Toronto, east side of Yonge St., north and south to city limits: West Toronto: G.T.R. Main lines to Shakespeare, Palmerston, Southampton, Sudbury and North Bay; G.T.R. main lines east, but exclusive of Kingston and stations on the K. & P. Railway.

H. Stevenson, 60 Hambly Ave., Toronto: Mr. Stevenson's district is City of Toronto, east side of Don River: north and south to city limits: east G.T.R. and C.P.R. to Kingston, inclusive.

Mrs. Shaughnessy, 29 Park Road, Toronto: Mrs. Shaughnessy's district is City of Toronto, north and south to city limits, from west side of Yonge St. (inclusive): west to Stratford and Port Dover Railway south of G.T.R. main lines to Lake Erie, excluding West Toronto.

H. J. Tutt, 39 Atlas Ave., Toronto: Mr. Tutt's district is City of Toronto, west side of Yonge St., to York St., but excluding York, University Ave. and Avenue Road to Northerly limits: south including portion of Toronto Island.

A. J. Wright, Preston: Mr. Wright covers all districts in the Province of Ontario for the purpose of investigating polishing plants, etc.

The work of this Branch during the year 1921 compares favorably with that of previous years. Routine inspections have been increased and a general survey of conditions in foundries and polishing plants in this Province has been undertaken.

Owing to trade conditions many industries were temporarily, some definitely, closed down or were working with reduced staffs.

As might be expected, in view of the general industrial situation throughout the Dominion, there was not a great number of new business buildings erected during the past year. However, plans for 70 new buildings and for extensions to 54 existing plants were submitted for approval during the year, in addition to a large number of drawings for fire-escapes which had been ordered by our Inspectors.

Generally, these plans showed substantial compliance with the spirit of our Act, although, in most cases some changes were required before they could be approved. In the majority of instances, these changes were necessary in consequence of insufficient or poorly located means of exit in case of fire—a subject which, too often, is evidently not given much consideration until the arrangement of the remainder of the building has been decided upon.

Increased inspection has entailed a larger amount of clerical work, and in addition to the general correspondence, 4,789 letters confirming orders issued by our Inspectors were written, as well as "follow up" letters.

Compliances have, on the whole, been satisfactory, and outstanding orders are well in hand.

TABLE No. 1.

	Year 1920	Year 1921
Total Inspections	13,812	14,349
1st "	8,613	8,713
2nd " or re-visits	5,199	5,636

Employees in above industries, mercantile establishments and office buildings inspected, numbered 238,472.

TABLE No. 2.

Year	Males over 16	Males 14-16	Females over 18	Females 14-18	Children under 14	Total
1920	189,760	2,694	72,644	8,547	281	273,926
1921	162,275	1,651	69,740	4,775	31	238,472

Birth Certificates were required and secured for employees of doubtful age, 365 in the year 1920 and 94 in 1921.

Orders issued dealing with the various requirements of the Act totalled in the year 1920, 7,431; in 1921, 7,254.

OVERTIME PERMITS.

There is again a decrease in the number of applications for overtime permits this year, as shown in the following table.

TABLE No. 3.

Year	Regular Sec. 34	Sec. 69	Bake Shop Sec. 70	Total
1920	203	.....	47	250
1921	96	.....	96	192

Owing to the large amount of unemployment, permits were reluctantly granted, and were only issued after thorough investigation as to the necessity, and when it was found that experienced help could not otherwise be obtained.

Fourteen Contract Clothing Permits under Section 52 were issued as compared with 125 in the year 1920.

PROSECUTIONS.

Proceedings were taken in four cases for failure to comply with the requirements of the Act as follows:—

To provide elevator gates ..... 1 case.
" erect fire escape ..... 1 case.
" have shop cleaned and put in sanitary condition. ..... 1 case.
" repair and make premises habitable ..... 1 case.

In all cases convictions are secured.

COMPLAINTS

One hundred and seventeen complaints were received during the year 1921, and 63 or a little more than 50% were sustained.

Subjects of complaints are shown in the table below

TABLE No. 4.

Year	Heat	Elev	Fire Protection	Child Labor	Hours of Labor	Sanitation	Exhaust System	B'l'rs	Toilet Accommodation	Ventilation	Safety	Miscellaneous	Total
1920	12	8	5	20	15	18	.....	.....	.....	12	.....	27	117
1921	22	9	5	8	9	2	9	14	19	.....	9	11	117

ACCIDENTS.

There is a decrease in the number of accidents reported during the past year, 4013 being reported, 46 of which were fatal, compared with 5185 in 1920 with 55 fatal.

Two fatalities were from natural causes, the others were due:—

To elevators	6
" machinery and its connections	11
" falling substances	3
" suffocation	2
" cars and engines	4
" falls	3
" cranes and derricks	5
" burns and scalds	4
" gas fumes	1
" cart shaft	1
" drowning	2
" electricity	2

Injuries and causes of all accidents are shown in tables appended. Particulars of fatalities are as follows.

Orazio Borghese, employed by the Algoma Steel Co., Sault Ste Marie, was killed instantly by a quencher car which came down from Battery. Was caught between hopper and electric locomotive.

A. S. McDonell, an employee of the Algoma Central & Hudson Bay Railway Co., Sault Ste. Marie, dropped dead—cause, heart disease and not from any injury.

Albert Deschamp, an employee of J. R. Booth, Ottawa, died from burns received while working on oil switch. Screw driver caused short circuit.

Lionel Sanctuer, also employed by J. R. Booth, Ottawa, was drowned, was running on the boom and slipped off into river.

G. McFadden, an employee of the Canadian Pacific Railway Co. Smiths Falls, sustained injuries while repairing car, from which he died; he removed sheathing supporting car door, allowing door to fall, crushing him beneath it.

C. E. Poole, an employee of Canadian Car & Foundry Co., Fort William, was found dead between tracks; neck and arm broken. Cause unknown.

John Laliberte Jr., employed by Hawkesbury Lumber Co. Ltd. while leading horse by the head was rammed by end of cart shaft.

Fred G. Stroud, employed by the Benjamin Electric Manufacturing Co., Toronto, was caught by elevator and skull was fractured.

John Kay, employed by Massey-Harris Co., Toronto, fell off elevator between 5th and 6th floors, dropping on the cement at base of shaft.

George Pond, an employee of the Sunbeam Lamp Co. Ltd., Toronto, was crushed when elevator descended.

Leonard Pipher, employed by Toronto Municipal Abattoir and Cold Storage Co. Toronto, was caught in revolving shafting above, and instantly killed; started work with torn overalls.

George Hurst, employed by the Canadian Allis-Chalmers Ltd. Toronto, died from injuries received when crane carrying sand from pit opened up allowing contents of bucket to fall on his head, fracturing skull.

William Price, another employee of above firm, died from effects of gas fumes from oil storage tank.

Hector Dubois, of the Dominion Sugar Co., Ltd., Wallaceburg, was caught between car and cab of locomotive crane and killed.

Samson Kennedy, an employee of St. Mary's Cement Co. Ltd., St. Marys, fell from high platform alighting on head, which caused death.

Daniel McLaughlan, employed by St. Marys Flax Company Limited, died from shock, result of foot being caught in scutching knives; leg was broken and lacerated.

Wesley Garrod, an employee of Wilson Canadian Co. Ltd., Chatham, fell into scalding vat. He took an unusual route; tried to take a short cut by crossing over the end of vat which is seven feet above walk provided for employees.

John Hull, employed by Canada Cement Co. Ltd., Belleville, died from injuries received when he was crushed between draw heads of box cars while coupling.

Wm. Pearce, an employee of the Pedlar People Ltd., died from burns. He slipped forward when dipping rods into hot tank, splashing solution over chest arms and abdomen.

Wilma London, an employee of the T. Eaton Co. Toronto, was crushed between elevator and floor.

Daniel C. Doxsee, employed by Samuel L. Purdy, Coe Hill, was struck by piece when pulley burst and lung was punctured.

Fred. Manso, employed by American Cyanamid Co., Niagara Falls, was struck over head by crane. Skull and ribs were fractured and chest bone cracked.

Mike Manyk, employed by Canada Cement Co. Ltd., while repairing clutch was caught and pulled around shafting.

Patrick Shannon, an employee of the Canadian Steel Foundries, Welland, was caught between body of derrick and carriage sustaining injuries from which he died. He climbed up when derrick was swinging without operator seeing him.

John T. Bishop, employed by Canadian Westinghouse Co. Ltd., was seized with acute abdominal pain while helping pour a mould. Internal hemorrhage causing death.

Jno. J. Knight, employed by the Coulter Wood Products, Ltd., Hamilton, was suffocated while removing shavings from bin.

John Ogden, also employed by Gartshore-Thompson Co. was struck by casing when hook attached to same came out and allowed it to roll over on him.

E. Brooks, an employee of the Dominion Foundries and Steel Co., Hamilton, died from burns when pouring wood alcohol into pot: In some way it ignited and container exploded.

Joseph Duggan, employed by Frost Steel and Wire Co. Ltd., Hamilton, died from injuries received when crane, through shearing of king pin, dropped from track.

Robert Holmes, employed by Gartshore-Thomson Pipe & Foundry Co. sustained injuries from which he died. While lowering casing in pipe pit, it caught on side of pit causing hook to come out and casing to fall. He was knocked down into pit.

Robt. McCoy, an employee of Morrow & Beatty Ltd., Matheson, while working in trench was struck on head by piece of falling plank causing concussion of the brain.

Charles Olich, an employee of the National Steel Car Co. Ltd., Hamilton, was caught between side of car and steel which was being loaded: steel tipped back crushing head.

At the Ontario Paper Co's. plant at Thorold the following fatalities occurred:

A. F. Beattie fell while climbing box car, and fractured skull.

John Semonych, while turning switch was caught between car and coal crusher.

Govereal Hancheruk, while removing logs from stock pile to conveyer was struck on head by log which slipped from top of pile and skull was fractured.

Wilfred Mills, was caught in drive belt underneath machine and killed instantly.

John Sibiski, employed by Pilkington Brothers Ltd., Thorold, was found dead, was putting in a switch to start motor and is supposed to have taken hold of the blade instead of handle.

Walter Payne, an employee of the Provincial Paper Mills Limited Thorold, was caught in elevator and skull fractured.

S. R. Grant, employed by the Fort Frances Pulp & Paper Co. Ltd., Fort William, was drowned. While returning to the camp for dinner pushed canoe out of safe into quick water and went over rapids.

A. G. Miller, employed by Fort William Paper Co. Ltd., was electrocuted. Put hand on handle of auto starter to start motor which drives slasher saw.

John Wozniak, employed by the Provincial Paper Mills, Port Arthur, was caught in gears of whipper on wet machine and drawn in. Died from injuries.

John Divett, an employee of the Spanish River Pulp & Paper Mills Co. Espanola was suffocated. While loosening coal in chute was carried down with it and buried.

Adrien Gauthier, employed by the Spanish River Pulp & Paper Mills, Sturgeon Falls, was drawn around pulley when motor was started. Was sitting or presumably asleep on bottom ply of belt behind motor.

Thos. Johnston, employed by the Forbes Co. of Hespeler, fell when gang plank was in some way pushed back off sill, and received injuries from which he died.

Lesh Monilo, employed by the Ontario Malleable Iron Co., Oshawa, was struck by part of emery wheel which broke and he died from injuries received.

Flay Weese, an employee of the Canada Cement Co., Point Ann, while standing on new cement butment was struck on head by driving belt.

Class of Industry	Head and Face								Upper Extremities								Trunk									Lower Extremities					Multiple	Fatal	Total
	Head	Ears	Eyes	Face	Lips	Forehead	Neck	Nose	Shoulder	Arms	Wrist	Hand	Thumb	Fingers	Elbow	Other injuries	Chest	Back	Ribs	Abdomen	Groin	Thigh	Side	Stomach	Hips	Leg	Ankle	Foot	Knee	Toes			
Metals	39	5	288	27	3	11	3	7	19	90	45	212	131	499	26	37	13	78	20	6	4	12	22	4	1	96	65	196	46	171	157	15	2318
Food	4	..	3	2	..	..	..	1	..	9	5	11	5	27	2	4	..	4	2	..	..	..	2	2	..	3	2	3	3	3	7	3	107
Wearing Apparel	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1
Leather	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Laundries	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
Process, Clay, Glass, Stone	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	6	9
Chemicals	2	..	5	1	..	..	..	..	..	1	1	5	3	16	1	1	..	3	1	..	..	1	..	1	..	5	3	3	1	8	6	1	69
Unclassified	1	..	..	..	..	..	..	..	..	..	..	1	1	2	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	2	9
Woodworking	..	..	2	1	..	..	..	..	..	2	..	5	6	14	1	1	..	..	2	..	..	..	..	..	..	..	1	1	1	1	4	1	43
Textiles	1	..	8	2	..	..	..	..	..	4	8	13	13	47	3	5	1	1	..	1	..	..	..	..	..	3	3	4	2	2	8	2	131
Conveyances	1	..	2	..	..	..	..	..	4	2	1	10	10	11	1	3	1	2	2	..	..	1	1	1	..	5	..	1	3	2	4	..	68
Rubber	1	..	1	..	..	..	..	1	1	2	1	5	2	19	..	5	1	3	3	1	..	..	..	1	..	6	1	9	3	6	3	..	75
Lumber	1	..	6	1	..	..	..	..	..	2	..	6	3	10	1	1	..	5	2	..	..	2	..	..	..	4	1	4	7	2	11	3	72
Pulp and Paper Trades	21	..	44	12	1	..	5	2	8	34	17	94	42	173	4	8	1	44	12	1	2	1	18	1	..	57	17	86	32	31	61	11	840
Transportation	14	..	18	3	3	..	..	2	2	6	2	21	16	23	2	11	1	13	3	1	..	3	2	..	..	15	11	22	11	8	22	2	237
	85	5	377	49	7	11	8	13	34	153	80	383	232	845	41	76	18	154	47	10	6	20	45	10	1	194	104	329	109	234	287	46	4 013

1921 ACCIDENTS—CAUSE

Class of Industry	Falling Substances	Infected Wounds, Blood Poisoning	Lifting Heavy Articles	Falls	Hand Tools	Electricity	Burns and Scalds	Drills	Emery Wheels	Hooks, Chains and Cables	Flying missiles or particles	Trucking	Jammed between or against	Elevators	Foreign substances in eye	Cranes and derricks	Belts, Pulleys and Shafting	Cogs, gears, setscrews, etc	Reamer	Presses	Saws	Lathes	Jointers	Other machines	Planers	Cars and engines	Shapers	Hammers	Shears	At chutes	Rolls	Sprains and Strains	Wire drawing	Grinding machine	Boring machine	Bulldozer	Other Causes	Riveters	Wire Coils, etc.	Winder	Suffocation	Conveyors	Knitting machines	Barkers	Drowning	Total
Metals	319	95	68	199	66	18	182	19	24	22	80	74	204	12	242	53	20	26	15	52	27	11	7	85	7	15	6	20	16	.	12	27	10	13	7	5	272	3	11	.	.	1	.	.	.	2,348
Food	6	8	3	10	.	.	1	.	.	3	4	4	2	1	1	1	3	.	4	.	6	2	.	13	1	4	.	.	.	.	.	.	.	.	.	.	31	.	.	.	.	.	.	.	.	107
Wearing Apparel	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
Leather	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
Laundries	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	3
Processes in Clay	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Glass, etc.	.	1	1	7	2	.	12	.	.	.	3	.	6	3	3	1	.	.	.	1	.	.	.	3	.	.	.	.	.	.	.	.	.	.	.	.	.	2	.	.	.	.	.	.	.	.	9
Chemicals	13	1	.	.	.	.	.	.	.	.	.	.	3	3	2	.	3	.	.	.	1	.	.	6	.	.	.	3	.	.	.	.	.	.	.	.	9	.	.	.	.	.	.	.	.	.	69
Unclassified	3	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	1	.	.	3	.	.	.	.	.	.	.	.	.	.	.	.	6	.	.	.	.	.	.	.	.	.	9
Woodworking	2	.	.	4	2	.	2	1	.	.	1	.	9	6	1	.	3	9	.	8	8	.	.	4	.	.	.	.	.	.	.	.	.	1	.	.	1	.	.	.	.	.	.	.	.	.	43
Textiles	4	11	3	9	1	.	2	4	.	.	2	6	9	4	8	.	5	2	.	.	.	1	.	26	4	.	.	.	.	.	2	.	.	.	.	.	20	.	.	.	1	5	.	.	.	131
Conveyances	4	4	.	4	3	1	3	.	.	.	.	1	7	1	2	.	.	.	.	1	1	.	1	4	1	1	.	.	.	.	1	.	1	.	.	.	15	.	.	.	.	1	.	.	.	68
Rubber	17	8	1	9	.	1	3	4	.	.	.	5	7	1	1	.	2	.	1	1	5	.	.	2	1	.	1	.	.	.	2	.	.	.	.	.	11	.	.	.	.	1	.	.	.	75
Lumber	6	3	1	10	2	.	3	.	.	.	1	3	2	2	3	.	5	.	.	1	9	.	.	1	.	.	1	.	.	.	2	.	.	1	.	.	15	.	.	.	2	.	.	.	.	72
Pulp and Paper	.	.	.	.	.	.	.	2	2	34	.	14	85	6	36	2	19	16	.	4	5	.	.	27	4	3	.	1	.	4	14	21	.	.	16	.	79	.	.	27	1	9	.	14	1	.	840
Trades	147	32	36	99	45	8	27	2	2	5	16	1	20	.	.	.	.	2	.	.	.	.	.	5	.	15	11	3	.	.	31	18	10	32	8	5	35	3	11	27	2	15	5	.	.	2	237
Transportation	47	1	12	37	16	2	13	2	2	5	.	1	20	.	.	.	.	2	1	.	.	.	.	5	1	15	.	.	.	.	4	21	.	.	1	.	35	.	.	.	.	.	14	.	2	4,013
	568	169	129	389	137	29	243	28	28	64	107	111	342	37	296	58	60	55	16	61	63	17	9	174	17	41	11	25	16	4	31	18	10	32	8	5	496	3	11	27	2	15	5	14	.	

SAFETY SUGGESTIONS AND STATISTICS

A Safety Idea—Publicity.

The inauguration of a permanent policy of publicity by the Department, having for its object the stimulation of employers of labour to a decisive stand for the prevention of accidents, or the reduction of accidents to the lowest possible level.

Not many years ago those men who advocated the study of methods for accident reduction as offering a distinct possible saving in manufacturing costs were looked upon, to a more or less extent, as being demented. The soundness of their belief however has been proven so conclusively as to be beyond question, and to-day accident reduction and the protection of workmen constitutes part of the permanent policy of every progressive industrial concern on the continent.

But there still remains a good deal of missionary work to be done, particularly in the smaller manufacturing plants where only a few men are employed, and in a good many cases where the management labour under the mistaken belief that the size of the factory does not warrant an active "Safety First" policy, not realizing how much is possible even by getting home the fact of "Acting Safety," "Thinking Safety," and "Talking Safety." To drive home to manufacturers the significance of this movement, which is unquestionably here to stay, is a cause well worth taking up, because accident reduction is still in its infancy, and owing to the necessity of bringing home to manufacturers what is possible in the way of accident reduction, both from the standpoint of the workers and the economics resultant from the prosecution of such a policy, the following suggestions are offered.

(1) Pamphlets drawing attention of manufacturers to the following points; How does percentage of accidents compare with, say five years ago? What reduction, if any, has been made? Analyze assessment made by Workmen's Compensation Board—what does it show?

Is part of the assessment returned because accidents are below the assessment level, or is a second assessment levied because the accidents are over the 100 per cent. mark? If the latter is the case then no time should be lost in adopting a "Safety First" movement, but if the former is the case the question then arises as to what percentage of reduction has been effected. Has the percentage reached the lowest possible level? This can be determined by comparison with the results achieved by other companies, three typical cases are quoted hereunder:—

(a) From an Ontario manufacturing company—

In 1920—571 accidents (lost time) representing 10,772 days of lost time and costing $95,722.73 in compensation.

In 1921—174 accidents, representing 2985 days of lost time, and costing $32,089.60 in compensation.

In 1921 the number of men employed represented a reduction off 33% over 1920, and the number of accidents were roughly 69% reduction over 1920.

(b) Another Company, employing 2500 men.

In 1916—769 men injured and lost time.
In 1917—371 " " " " "
In 1918—124 " " " " "

In other words five sixths of all accidents were eliminated in three years. Five years ago this firm was paying $35,000 to cover loss of time etc, from accidents. In 1918 the total cost of compensation was $4,500.

(c) Another Company, whose works includes coal, mines, logging camps, sawmills, railroads, steel mills, foundries, machine shops, and twine mills. During the past five years experience in accident prevention work, deaths from accidents have been reduced 60 per cent. In some of the larger plants, deaths and serious injuries have been reduced more that 75 per cent. and in the steel mills, employing 1300 men, deaths and serious injuries have been reduced 88 per cent. with a corresponding reduction in compensation costs due to injuries and lost time.

(2)—Dangerous Practices.

Two-thirds of all accidents are attributable to Dangerous Practices, which include want of instruction, want of thought, and perhaps more than all, want of proper appreciation of danger. The solution for this is in a thorough "Safety First" movement, which must dispel the workmen's and managements' apathetic attitude towards accidents, and inculcate in them the "Safety First" spirit.

(3)—Dangerous Places.

One-third of all accidents are the result of machinery, and authority has it that one-third of this number could be eliminated by machinery adequately guarded. To offset this, necessitates legislation together with thorough factory inspection. Much might be done by the use of Bulletins showing, we will say, on the one side an exposed gear, and on the other, one suitably guarded, then literature explaining the necessity of guarding gears regardless of the position they occupy, and citing cases where accidents have resulted from what was apparently a "safe set of gears." This could be supplemented at periodical intervals by similar Bulletins on pulleys, fly wheels and driving belts, set screws, sprocket wheels and chain, rolls and knives, punch presses, grindstones and emery wheels, wood-working machinery, etc., etc., also by Bulletins on removal of guards for repairs, etc., and failure to replace them when repairs are completed, and by Bulletins defining functions of "guards," such as the following, set forth in the report of the British Industrial Safety First Conference:—

(1) It should prevent access to the dangerous part so long as the danger exists.

(2) It should be constructed of such materials and in such a manner as to withstand the wear and tear to which it is likely to be subjected.

(3) Wherever practicable it should form an integral part of the machine and have been considered in its design.

(4) It should, where necessary for intermittent dangers, be automatic in action.

(5) Its removal should not be necessary for the purpose of lubricating parts of the machine or the material under operation, or for changing belts, gears, etc.

(6) It should not introduce any fresh risk or accident.

(7) It should not be so hinged or hung as to be easily opened or removed when frequent adjustments and alterations are necessary, but in such cases should not be easily removable from the immediate neighborhood of the machine.

(8) It should not interfere unduly with the output of the machine.

Suitable posters representing the results of minor injuries where no medical treatment was given, and also the results from septic cases, and amplifying these with other posters pertaining to "Safety First."

Accident prevention has been treated here under three broad headings the first being the means by which manufacturers can be induced to adopt the "Safety First" movement. It is an obvious fact that where an industry is operated primarily for gain, any appeal that is going to be made must point out some monetary gain which will accrue from the adoption of this move and it is with this object in view that some practical suggestions for educational propaganda are given in Section 1. The second heading "Dangerous Practices" is subject matter where the active support of the management has been enlisted, and the best practical means of coping with this has been the forming of "Safety First" committees. The third heading "Dangerous Places," is covered by legislation and factory inspection for guarding machinery considered dangerous, and also by "Safety First" committees in plants for the removal of obstacles etc.

BOILER INSPECTION

Chief Inspector: D. M. Medcalf

Inspectors: H. Brown, F. Swarbrick, J. A. Findlay, W, Burns, T. J. Main, J. R. Dey.

DRAWINGS AND SPECIFICATIONS SURVEYED AND REGISTERED

Boilers, H.R.T.	2	designs	$ 5 00	per design	$ 10 00
" H.R.T.	3	"	10 00	"	30 00
" Verticle	9	"	5 00	"	45 00
" Verticle	1	"	7 50	"	7 50
" Verticle	12	"	10 00	"	120 00
" Locomotive	18	"	10 00	"	180 00
" Locomotive	1	"	5 00	"	5 00
" Water tube	5	"	10 00	"	50 00
" Simplex	1	"	10 00	"	10 00
" Heating	8	"	5 00	"	40 00
" Heating	14	"	10 00	"	140 00
" Vulcanizer	3	"	5 15	"	15 45
" Vulcanizer	8	"	5 00	"	40 00
Boiler Fitting	1	"	5 00	"	5 00
Tanks	50	"	5 00	"	250 00
Tar Tank	1	"	5 00	"	5 00
Vulcanizers	15	"	5 00	"	75 00
Pressure Vessels	2	"	5 00	"	10 00
Air Receiver	1	"	5 00	"	5 00
Garbage Burners	2	"	5 00	"	10 00
Dryer Shell	1	"	5 00	"	5 00
Drying Pan	1	"	5 00	"	5 00
Steam Tables	2	designs	$5 00	per design	$ 10 00
Steam Jacketted Kettle	1	"	5 00	"	5 00
Steam Separator	1	"	5 00	"	5 00
Superheater	1	"	5 00	"	5 00
Fittings	24	"	3 00	"	72 00
Piping Plans	24	"	5 00	"	120 00
Piping Plans	5	"	7 50	"	37 50
Piping Plans	2	"	10 00	"	20 00
Revision	1	"	5 00	"	5 00
Total	220				$ 1,342 45

NUMBER OF NEW PRESSURE VESSELS INSPECTED

Ontario	419	inspections	$5.00 per inspection	$ 2,095 00
Great Britain	12	"		64 94
United States	33	"	$5.00	165 00
British Columbia	1	"	$10.00	10 00
Total	465	inspections		$ 2,334 94

New Boilers inspected	396	at $5.00 per boiler	$ 1,980 00
Registered boilers inspected by Insurance Companies in the United States	33	at $5.00 per boiler	165 00
Registered boilers inspected by Insurance Companies in Canada	6	at $5.00 per boiler	30 00
Registered Boilers inspected by Insurance Companies in Great Britain	12		64 94
Manufacturer's inspection accepted	2	at $5.00 per boiler	10 00
New boilers inspected for British Columbia	1		10 00
New Digesters inspected	8	at $5.00 each	40 00

New Tanks inspected	5 at $5.00 each		25 00
New Garbage Burner inspected	1 .		5 00
New Pipe Line inspected	1 .		5 00
Total number of inspections	465 .	$	2.334 94

NUMBER OF PRESSURE VESSELS REPAIRED, SOLD OR EXCHANGED.

Number of used boilers inspected	707	$5.00 per inspection	$	3,535 00
Number of used boilers scrapped	2	" "		10 00
Number of used boilers condemned	3	" "		15 00
Number of used boilers exploded	1	" "		5 00
Number used air tanks inspected	36	" "		180 00
Number used air receivers inspected	3	" "		15 00
Number used vulcanizers inspected	1	" "		5 00
Number hat presses inspected	3	" "		15 00
Number used steam mangles inspected	1	" "		5 00
Number tilting traps inspected	1	" "		5 00
Number tube tests	1	" "		5 00
Number used pipe lines inspected	6	" "		30 00
Total number of inspections	765 .	.	$	3,825 00

This is not a complete record of all inspections made by our inspectors, because on many occasions they have to make two or three inspections but only collect the fee on the first visit. For work on second-hand pressure vessels the travelling expenses are collected on each trip made.

MISCELLANEOUS

Class "A" Certificates issued	438
Class "B" Certificates issued	536
Heating Boiler Certificates issued	420
Pressure Vessel Certificates issued	287
Letters outward	4,620

REVENUE STATEMENT

DR.		CR.	
Fees for designs surveyed	$ 1,342 45	Amount of moneys transmitted to Treasury Department through Department of Labor .	$ 12,287 27
Fees for new pressure vessels	2,334 94		
Fees for used pressure vessels	3,825 00		
Fees for heating boilers	420 50		
Fees for pressure vessels at $1.00 each	287 00	Amount of moneys written off by Journal	14 95
Travelling expenses collected	4,098 08		
Balance outstanding at end of year, 31st October, 1920	8 50	Balance outstanding at year ending 31st October, 1921	14 25
	$12,316 47		$12,316 47

In comparing this year's report with that of 1920 it will be observed that there is a slight decrease in the number of new boilers constructed, and also of boilers sold or exchanged for use within the province of Ontario; this is due to the recent slackening of industrial activities . With this exception there has been a steady increase yearly in the amount of work accomplished by this branch of the Department since the enforcement of the Steam Boiler Act in 1913.

A great deal of time has been given to surveying designs of vulcanizers and other pressure vessels, which has been brought about by the ever-increasing demand for this equipment in connection with the automobile industry.

Numerous complaints have been received from Canadian manufacturers and dealers in steam boilers and other pressure vessels that there is and has been a large number of pressure vessels shipped into Ontario for which drawings have not been submitted for approval and given a registration number. In every case reported an investigation has been made, and when necessary an inspection, the allowable working pressure fixed and the certificate issued.

In a number of cases the vessels were found not constructed sufficiently strong to withstand the pressure for which they were sold, and the reduced pressure fixed by the inspector was not sufficient for the purpose desired. This of course created a hardship on the purchaser, who in a large number of cases was not aware of the requirements of the Steam Boiler Act. It will be a difficult matter to avoid trouble of this description in the future unless some arrangements are made with the Federal authorities at the points of entry to notify this branch of the Department when shipments of pressure vessels are made, and to whom they are consigned. This violation of the Steam Boiler Act is most unfair to our Canadian manufacturers who have submitted their designs of pressure vessels for approval and paid the prescribed fees and received their registration numbers.

Special attention has been given to welding by the Oxy-acetylene and the Electric processes. One manufacturer proposed placing on the market boiler tubes which were oxy-acetylene welded, and forwarded samples for testing purposes. The necessary tests of expanding tube in tube plate were made and proved a failure; the crushing and folding tests also failed, which clearly indicated that this method of manufacture is useless for boiler practice.

Considerable welding of high pressure steam pipe lines has been undertaken, and although the regulations do not cover work of this description it is found expedient to accept this method of welding when high pressure mains have to run underground for long distances inside tile or other conduits. All such pipe arrangements must be submitted for approval, and the work of welding done by persons whose skill and reliability in this class of work are known, because many operators are experiencing trouble due to the lack of knowledge of metals and the principles of contraction and expansion. Up to the present time very satisfactory results have been obtained with the work accepted.

A manufacturing firm in Hamilton required for special purposes a boiler of a peculiar construction, made up largely of pipes, and although this type of boiler is not recommended, a special permit to install one was granted and same will be under observation for at least one year, and the result of the operation of same noted for future guidance.

Although there has been a number of explosions of boilers, air tanks, and hydro-pneumatic tanks only two have been reported to this office, on account of the Steam Boiler Act not demanding such accidents to be reported.

On November 17th, 1920, a boiler near Melbourne, Ont., exploded, completely wrecking the plant. The explosion occurred early in the morning after the attendant had fixed the fires and was away from the boiler. This boiler was sold for a steam working pressure of 135 pounds and was supposed to be working at 120 pounds. It had been rebuilt, and the notification of repairs or re-sale had not been forwarded to the Department. If the requirements of the Steam Boiler

Act had been complied with, and the inspection made, a maximum steam pressure of only 85 pounds would have been allowed, using a factor of safety of 5.5 in our calculations.

On September 7th, 1921 one boiler exploded five miles from Mitchell, resulting in the complete destruction of same but fortunately no person was around at the time of the explosion.

There was also an explosion of one ordinary gasoline barrel fitted up as an air receiver, which wrecked the electric motor and air pump.

Numerous boilers and other pressure vessels have been inspected on which safety valves had not been fitted. The inspectors ordered valves of the proper type and dimensions to be installed, but owing to the present wording of the Steam Boiler Act there is no way of following up the work of removal or installations of second-hand boilers. This also applies to new boilers because, after they have been finally inspected and leave the place of manufacture, the Department has no jurisdiction over them, unless they are extensively repaired or are resold.

Owing to certain pressure vessels that were manufactured in the United States and shipped in large quantities into Canada not figuring up to requirements, the different dealers were notified that they must not be sold without being covered by a certificate issued from the Boiler Inspection Branch. Shortly after this ruling, the manufacturers' representative visited the Department and stated that our laws were too rigid, and requested that tests be conducted on some of their pressure vessels. This was done and five tanks were selected from several hundred, three of which were welded by the oxy-acetylene process and two by the electric process. The first three tanks failed before reaching the pressure figured according to our calculations, using a factor of safety of 5. The electric welded (Thompson process) tanks withstood a high test pressure, and from the tests it was deduced that the strength of the seam welded by this process was 74.5% of the solid plate. A ruling has been made that welding by oxy-acetylene shall be prohibited where the plates are in tension, because the tests indicated clearly that this method of welding cannot be relied upon. The electric welding (Thompson process) will be allowed 65% of the solid plate when calculating the allowable working pressure on air receivers.

This clearly demonstrated that our rules and regulations were far from being too stringent, and the manufacturers quite agreed and they are now quite willing to design tanks that will be shipped into this province in a manner to meet with our requirements.

APPENDIX A

INDUSTRIAL DISPUTES IN ONTARIO, 1921, BY INDUSTRIES
(From figures published in the Labour Gazette)

Industries	Number of Disputes	Numbers involved		Time loss in working days
		Employers	Employees	
Building and Construction	16	277	2723	118,814
Metals, Machinery and Conveyances	6	8	141	8,068
Woodworking and Furniture	4	4	112	2,456
Pulp and Paper	4	4	2888	121,574
Printing and Publishing	5	151	1569	207,259
Clothing	6	14	1322	20,685
Textiles	1	1	26	676
Food, Liquors and Tobacco	3	16	1742	35,626
Leather	3	3	41	4,329
Miscellaneous	5	13	236	1,723
Totals	53	491	10,800	521,210

INDUSTRIAL DISPUTES IN ONTARIO 1916-1921

Year	Number of Disputes	Number of employees involved	Time loss in working days
1916	33	4,619	62,686
1917	54	9,707	65,148
1918	71	11,867	134,234
1919	116	43,288	1,021,655
1920	102	12,256	228,992
1921	53	10,800	521,210

APPENDIX B

INDUSTRIAL STATISTICS, PROVINCE OF ONTARIO
(From Preliminary Report issued by Dominion Bureau of Statistics)

TABLE I. PRINCIPAL STATISTICS OF INDUSTRY 1917, 1918, 1919

	1919	1918	1917
Establishments No.	16,438	15,365	14,381
Capital $	1,583,161,271	1,508,011,435	1,335,968,699
Employees on salaries No.	44,545	39,218	37,132
Salaries $	67,249,559	56,802,691	49,270,800
Employees on wages No.	278,814	294,754	289,503
Wages $	269,328,710	263,937,523	229,191,908
Cost of materials $	943,622,018	1,008,824,704	822,842,054
Value of products $	1,737,534,996	1,809,067,001	1,533,738,655

TABLE II. FORTY LEADING INDUSTRIES IN THE PROVINCE OF ONTARIO, 1919

(A) Establishments, Capital, Cost of Materials, Value of Products.

Industries	Establishments	Capital	Cost of Materials	Value of Products
	No.	$	$	$
Flour and grist mill products	588	39,726,415	130,724,527	150,061,254
Slaughtering and meatpacking	28	50,232,669	101,596,624	129,994,795
Automobiles	11	34,949,739	51,690,715	80,619,846
Lumber, lath, shingles, etc	852	59,199,886	17,548,563	60,565,554
Butter and cheese	1,104	8,891,375	48,478,274	56,910,946
Pulp and Paper	38	95,281,040	24,205,491	55,001,242
Rubber goods including rubber boots and shoes	23	33,005,888	22,119,010	43,688,975
Foundry and machine shop products	418	68,821,443	17,623,447	51,623,034
Building and construction	721	22,357,947	15,981,688	42,221,209
Leather, tanned, etc	41	29,005,861	27,502,787	36,759,376
Agricultural implements	53	78,748,765	15,813,095	34,495,038
Rolling mills and steel furnaces	16	42,000,066	14,056,999	34,451,720
Hosiery and knit goods	83	26,406,228	19,540,510	33,775,672
Smelting	9	31,771,822	.....	31,189,366
Biscuits and confectionery	169	18,311,829	15,414,211	30,190,605
Clothing, women's factory	106	15,337,903	15,168,493	27,613,987
Electric light and power	380	192,898,095	.....	25,639,639
Bread and other bakery products	733	10,315,674	16,517,888	25,173,887
Plumbing and tinsmithing	845	14,502,026	12,865,198	24,142,559
Petroleum, refined	3	17,484,694	14,402,674	22,936,578
Woolen goods	56	17,278,981	12,635,642	22,762,557
Sash, door and planing mills	313	22,123,800	13,845,381	22,424,947
Electrical apparatus and supplies	64	25,482,946	7,870,103	21,081,206
Furniture and upholstered goods	180	21,030,165	7,836,715	20,662,069
Shipbuilding and repairs	11	29,911,885	7,547,732	20,461,106
Clothing, men's factory	57	10,938,519	9,662,401	19,020,285
Boots and shoes, leather	56	10,863,924	10,860,496	18,188,226
Pig iron	7	15,614,405	5,514,152	17,823,451
Printing and Publishing	382	17,424,700	4,722,091	17,725,021
Car repairs	37	.....	5,330,670	17,244,083
Cottons	11	13,632,846	7,879,302	15,652,256
Printing and bookbinding	290	13,031,861	5,189,119	14,919,323
Sugar, refined	3	3,441,751	10,800,812	13,940,937
Condensed milk	17	5,683,621	10,525,423	12,986,573
Fruit and vegetable canning	91	8,683,394	7,655,760	13,303,271
Soap	12	8,426,940	9,022,242	12,880,073
Iron and steel products	23	9,846,027	6,628,743	12,167,718
Cars and car workers	4	11,851,623	6,307,932	10,822,888
Furnishing goods, men's	40	6,072,059	5,871,464	9,986,345
Clothing, men's custom	671	5,136,456	4,526,458	9,503,795
Totals for forty leading Industries	8,546	1,145,725,268	741,482,832	1,320,611,412
Totals for all Industries	16,438	1,583,161,271	943,622,018	1,737,543,996

TABLE II. FORTY LEADING INDUSTRIES IN THE PROVINCE OF ONTARIO 1919—Continued.

(B) Employees, Salaries and Wages.

Industries.	Employees on Salaries		Employees on Wages	
	Number	Salaries	Number	Wages
		$		$
Flour and grist mill products	633	1,080,642	3,353	3,248,087
Slaughtering and meatpacking	1,710	2,116,685	5,276	5,885,650
Automobiles	937	1,560,633	5,834	8,152,155
Lumber, lath, shingles, etc	1,222	1,846,144	21,932	16,871,282
Butter and cheese	2,623	1,806,322	1,267	1,394,962
Pulp and paper	713	1,464,221	7,758	10,268,092
Rubber goods including rubber boots and shoes	1,327	1,678,008	7,201	6,790,962
Foundry and machine shop prod	2,431	3,737,271	13,601	14,473,926
Building and construction	934	1,378,215	11,241	12,884,383
Leather, tanned, etc	232	616,102	2,739	2,709,934
Agricultural implements	1,172	1,721,990	8,758	9,423,607
Rolling mills and steel furnaces	322	706,583	6,474	8,679,852
Hosiery and knit goods	567	1,005,819	8,721	5,423,926
Smelting	323	699,435	2,155	3,067,051
Biscuits and confectionery	873	1,320,361	5,982	3,912,502
Clothing, womens factory	782	1,475,002	5,715	6,393,067
Electric light and power	2,230	2,810,233	2,609	2,974,106
Bread and other bakery products	513	655,915	4,053	4,023,733
Plumbing and tinsmithing	777	922,338	4,967	4,814,126
Petroleum, refined	198	308,221	1,540	2,016,201
Woolen goods	216	527,866	4,316	3,290,298
Sash, door and planing mills	565	797,663	4,028	3,568,518
Electrical apparatus and supplies	1,182	1,705,092	5,092	4,536,565
Furniture and upholstered goods	727	1,158,589	6,498	5,112,209
Shipbuilding and repairs	243	485,014	5,328	5,845,328
Clothing, men's factory	695	1,306,193	3,374	3,166,383
Boots and shoes, leather	590	1,093,755	4,002	3,135,823
Pig iron	67	165,471	989	1,521,102
Printing and publishing	2,066	2,722,269	4,156	4,079,777
Car repairs	467	808,423	7,219	10,434,751
Cottons	95	253,054	3,356	2,348,197
Printing and bookbinding	886	1,376,819	4,218	3,972,267
Sugar, refined	111	203,860	818	910,358
Condensed milk	88	130,805	660	568,446
Fruit and vegetable canning	223	291,480	2,270	1,262,649
Soap	244	375,227	811	616,994
Iron and steel products	215	409,231	1,918	1,976,168
Cars and car works	218	372,799	1,614	2,014,894
Furnishing goods, men's	390	772,935	2,235	1,361,399
Clothing, men's custom	289	417,131	2,422	1,990,332
Totals for forty leading industries	30,096	44,283,816	196,500	195,120,062
Totals for all Industries	44,545	67,249,559	278,814	269,327,710

REPORT

OF THE

Minister of Education

Province of Ontario

FOR THE YEAR

1921

PRINTED BY ORDER OF

THE LEGISLATIVE ASSEMBLY OF ONTARIO

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REPORT

OF THE

MINISTER OF EDUCATION

FOR THE YEAR 1921

To His Honour,

HENRY COCKSHUTT, ESQ.,

Lieutenant Governor of the Province of Ontario.

Your Honour,—

I beg leave to present the Report of the Department of Education for the year 1921.

The educational situation in the Province is satisfactory. Notwithstanding the fact that the economic and social forces of the time are not wholly favourable, the progress made by the elementary and secondary schools of Ontario has been substantial and continuous. Public interest has shown no signs of flagging. The readiness of both rural and urban communities to enter upon necessary expenditures has been remarkable. The attendance of pupils has improved and is now better than in previous years. The salaries of teachers have risen. The professional training schools are well attended and the supply of teachers is not inadequate. Although the burden of general taxation on account of necessary purposes is heavier, a generous policy toward the schools has not ceased. All these factors are matters for gratification, as showing that the Province maintains unimpaired its historic zeal for education. Our system of education is not bureaucratic. The powers conferred by the Legislature upon the central authority are checked by the large measure of self-government assigned to the school boards. Such a division of control has been challenged, but it ensures activity and interest by the people at large and confirms every year the wisdom of making our educational machinery as democratic as possible. During the trying years that have passed since the close of the war it has been manifest that without popular concern for education, the administrators of the system would not have accomplished alone the advances secured by the co-operation of trustees and teachers. This includes the efforts made by such organizations as the Women's Institutes, the Canadian Red Cross Society, the Home and School Clubs, etc. to all of which bodies the thanks of educationists everywhere are due.

Educational Conferences

During 1921 the meetings and conventions held to stimulate the public interest in education have been numerous. Noteworthy among them was the Imperial

Conference which met in Toronto in August, and was well attended by representatives from Great Britain and the outlying states of the Empire. The gathering was officially recognized by the Ontario Government and the delegates spoke in appreciative terms of the hospitalities and receptions arranged for them. The reports of the proceedings which have since appeared in the educational press, at home and abroad, furnish evidence of the usefulness of the conference. Ontario was represented at the meeting held at Winnipeg, in the month of October, to consider the question of children needing special care. The purposes of this conference were to discuss all questions involved in the administration of laws relating to the protection and care of children: to attempt to secure uniformity in these laws and in the methods of their administration and enforcement so far as possible, and to effect co-operation among departments charged with the administration and enforcement of these laws and with other agencies operating in the field of child welfare. The presiding officer was Dr. Helen MacMurchy of the Federal Bureau of Child Welfare, and an organization was formed for the whole Dominion to establish closer associations between the professional and volunteer workers in this valuable branch of activity. It may be mentioned also that a conference of Ministers of Education, Superintendents and Deputy Ministers from all the Provinces will meet by invitation in Ontario during 1922, to confer upon subjects of common interest and to consider, especially, the plans for a gathering designed to be held in Toronto at Easter, 1923, under the auspices of the National Council of Education. To this meeting, it is believed, will come many persons of distinction who have devoted their time and talents to the general welfare of education.

Growth of Schools

The progress of our schools is illustrated in the statistics appearing in this Report. They relate chiefly to 1920. The total number of elementary schools has increased to 6,801, and the enrolled attendance to 564,972. This is an increase of more than 18,000. The enrolled attendance in rural schools has improved by nearly 5,000 pupils and was in 1920, 226,444. The average attendance also increased in that year, in both rural and urban schools, and while the complete figures for 1921 have not yet appeared, there is no doubt the improvement in attendance has not only been sustained, but enhanced.

The Position of Teachers

The steady advance in the position of the professional teacher recorded in recent years continues unchecked. This is especially true of the rural schools. The supply of adequately trained teachers is encouraging and, excepting in remote schools, which are not easily staffed, even at high salaries, by teachers holding professional certificates, it is demonstrated that the salary scale is the real index to the whole situation. As to salary, the following table sets forth the facts for the years 1919 and 1920:

	1919		*1920*		*Increase*	
	Male.	Female.	Male.	Female.	Male	Female
Rural Schools	$ 807.	$663.	$1,059.	$ 868.	$252.	$205.
Urban Schools	1,780.	991.	1,964.	1,146.	184.	155.
All Schools	1,348.	817.	1,575.	1,000.	227.	183.

Furthermore, as an incentive to the teaching body, those with higher certificates command the better salaries. The number of men in the elementary schools is slightly over ten per cent. of the whole, but it is satisfactory to note that the

number tends to increase and the present attendance in the training schools for the current school year emphasizes this point.

Cost of Elementary Schools

In school property an enormous sum of money is now invested. The total value of elementary school sites, buildings and furniture, was $60,823,454 in 1920, and the value of the equipment was $2,276,197. This is an increase of $10,866,164 in sites, buildings and furniture, and of $249,178 in equipment. The Legislative Grants to these elementary schools in 1920 was $1.612.837, an increase of $296.308 over the previous year. The amount paid in teachers' salaries advanced by about $3,000,000, or from $10,160,399 to $13,070,038, while the total expenditure increased by $6,364,885 and reached the grand total of $25,216,512. The cost per pupil of enrolled attendance increased from $34.49 to $44.63. The relation between the high cost per pupil and the small attendance in too many schools is of course evident.

Rural Organization

The whole question of schools with a few pupils in attendance is not merely a financial problem, but one of educational efficiency as well. Efforts are being made in many localities to deal with the condition by arrangements to convey the pupils from one section to another. This is not always practicable. In many cases the true remedy is consolidation, but this is a voluntary measure and must be left to the good sense and enterprise of the people themselves. Nor will consolidation work everywhere, and the adoption of measures to deal with each particular case calls for the exercise of wisdom, patience and knowledge. There are about 5,000 one-teacher schools in the Province. It is not yet generally recognized how many of them have an entirely inadequate average attendance and to what dimensions the problem has attained. The statistics for 1920 are of great significance:

Schools with 1 pupil	6
" " 2 pupils	24
" " 3 "	46
" " 4 "	71
" " 5 "	98
" " 6-9 "	641
" " 10-14 "	1,140

These and other considerations have led the Government to appoint a Director of Rural School Organization, an officer who will make a thorough examination of the situation in its various aspects, and with the co-operation of other administrative officials and inspectors, propound, for consideration, plans to deal with a condition produced by many factors, economic and social, and by the changes incident to the growth of a long-settled Province. The new Director is Dr. W. J. Karr, whose instructions are to develop constructive plans after investigating the question on all its sides; to confer with the rural authorities in all parts of the Province; to make a special study of individual and exceptional cases; to take charge of the promotion of consolidation of rural schools; and to investigate conditions wherever advanced courses are not now sufficiently provided by neighbouring high schools or continuation schools. This is a large programme, but in carrying it out on a comprehensive and adequate scale the most pressing needs of education in rural Ontario will be met.

In his report the Chief Inspector of Public and Separate Schools, Dr. Waugh, cites the figures, produced at a meeting of western school trustees, showing the

cost per pupil in the state systems of the various Provinces in 1919. These statistics may well be reproduced here:

Saskatchewan	$60 79
British Columbia	58 73
Alberta	52 89
Manitoba	46 34
Ontario	38 73
Quebec	34 65
New Brunswick	21 54
Nova Scotia	19 60
Prince Edward Island	16 25

The Chief Inspector's comment (in which I concur) is: "The very considerable increase in the school grants paid in Ontario since that time has resulted in large advances in the salaries paid teachers, and this would greatly modify these figures so far as this Province is concerned. But even these advances would fail to justify the criticism sometimes made by the uninformed that the costs of education here are excessive. In 1920, a year later, the cost per pupil in Ontario was still only $47.57."

Vocational Instruction

There will be found in the attached report of Dr. Merchant, Director of Industrial and Technical Education, a convenient and impressive summary of the progress made, during ten years, in vocational instruction generally. The special problems that have arisen during this development are also set forth: The difficulties of constructing the courses of study; the task of the teachers in these schools; the need of linking up apprenticeship agreements with vocational training; the relation between technical and industrial courses: the provision of professional training for instructors. The working out of these and other matters inseparable from the evolution of new types of instruction presents a great opportunity in education. As the Director states: "The schools are finding for themselves an established place in the educational system of the Province. On the industrial side they are providing for the young people who are to enter industry the essentials of a good academic education, and at the same time furnishing a special training in the subjects and operations which are fundamental to the trades and industries in which they are to be employed." In the allied branches of vocational and industrial instruction, Ontario has been making steady advances. The financial support, from three sources,—provincial, federal and local,—has been adequate, and the conditions laid down in order to secure this support have ensured the establishment of schools only where they are needed and only of the type required in each locality. The federal grants to technical education are in strict accordance with the agreement made between the Province and the Dominion, so that wasteful or unnecessary expenditures are guarded against. The total amount of the federal payments on this account in 1921 was $344,956. The instruction of teachers for these forms of instruction,—essential to their permanent usefulness and efficiency,—has hitherto been carried on in summer schools, but something of a more thorough and systematic character being required the Province should go forward at once to the establishment of a college of professional training for this purpose. This policy is now under consideration for immediate and definite decision.

Arising out of the present situation in relation to the operation of the Adolescent School Attendance Act are questions which also press for speedy action. The conclusions of Dr. Merchant in this respect call for careful consideration:

"The most important of these is the establishment of part-time courses for those who hold home permits or employment certificates under this Act. As has been pointed out from time to time in my reports, part-time courses of instruction have been voluntarily organized in co-operation with industries in several of the day technical schools. But after September, 1922, all school boards in urban municipalities with a population of 5,000, or over, must make provision for the establishment of part-time courses, and all young persons between fourteen and sixteen years of age, who are at work, must attend school at least four hundred hours per year. After September 1923, the same municipalities must extend their courses to give instruction to workers between sixteen and eighteen years of age for three hundred and twenty hours per year.

While the responsibility for establishing these courses rests with the municipalities, the Department of Education must be prepared to give direction and assistance to boards and advisory committees. As a matter of fact, all the steps that have been taken in the direction of establishing vocational classes and schools have had in view a permanent organization which would provide satisfactorily for compulsory part-time courses as well as for full-time instruction in academic and vocational subjects. Classes established and maintained under the Vocational Education Act will be found, as a rule, most suitable for all workers who have reached the fourth book standard of the public school, because all part-time courses of study, planned under this act to meet the needs of employed boys and girls, must provide instruction in the subjects of a general education as well as a training in the subjects, processes, and operations which are fundamental in the commercial, agricultural, home-making, art, or industrial occupations in which young persons are actually engaged or into which they wish to enter. On the educational side, therefore, the enforcement of the Adolescent School Attendance Act will not only give a great impetus to the establishment of vocational education, but will present important problems in organization and administration that must be solved."

Secondary Education

The High Schools and Collegiate Institutes now number 168 with an enrolled attendance of 34,128. The expenditure on these schools in 1920 was $3,588,933, and the increased cost of maintaining them over the previous year is due to higher salaries for teachers. The value of school buildings and sites is $8,814,764, while the value of the equipment amounts to almost another million.

For the first time statistics as to the age of the pupils on enrolment in the first form and their progress throughout the courses of the secondary schools are being collected.

In the "Age, Sex and Grade" tables in the Statistical appendix of the Report, the standing of the boys and girls as on June 1st, 1921, according to their ages, in each school and in comparison with the other schools, is given, as well as the situation as a whole for both the Continuation and the High Schools.

The average age of the pupils on entering Form I of the High Schools in September, 1920, was 14.32 years.

The ages as on June 1st, 1921, were as follows:

	Boys.	Girls.
Lower School, Form I	15.05 years	15.08 years
Lower School, Form II	16.15 "	16.18 "
Middle School	17.48 "	17.39 "
Upper School	18.38 "	18.15 "
All	16.15 "	16.09 "

The Continuation Schools are 144 in number and the close connection between

them and rural life is shown by the fact that more than half of the pupils in attendance are the daughters and sons of farmers.

The position of the secondary schools in our system is now being carefully considered. The changes in the courses of study thus far agreed upon by the highly competent committee on high school studies have gone into effect. Two interim reports of this committee, which is still at work, have been published and issued as a guide to the schools. The joint report of the high school inspectors indicates generally the effect of the new system upon the schools. The necessary revisions of the High Schools Act and Regulations are in progress and it is expected that by another year the Legislature will have before it a measure dealing with the administrative and financial phases of the secondary school system. It is intended to consult the municipal authorities in respect to county high schools, in order, if possible, to arrive at conclusions that will prove acceptable to all.

Grants to Separate Schools

Attention has been drawn during the past few months to the system of apportioning the Legislative grants to elementary schools, public and separate, and to the resultant occurrence of apparent discrepancies in the aid given to public and separate schools in the same localities. The total amount due to separate schools from the Legislative vote is fixed by laws passed before and at the time of the establishment of the Dominion in 1867 and beyond the power of the Legislature to diminish. The details are, in some measure, however, subject to modification. A statement prepared for the Legislature outlining the system in vogue for many years may be quoted here:

There has been no change in the Legislation affecting separate schools since the present Government took office. Nor have any changes been made in the regulations affecting the grants to urban or rural schools which would give separate schools more money than the amount to which the law entitles them. The system in vogue during 1920 and 1921, is the one which was in operation before I came to the Department.

The share of the separate schools in the Government grant for elementary education is secured by the Separate School Act of 1863. The clause which applies to this phase of the matter is as follows:—

> "Every Separate School Board shall be entitled to a share in the fund annually granted by the Legislature of this Province for the support of Common Schools, and shall be entitled also to a share in all other public grants, investments, and allotments for Common School purposes, now made or hereafter to be made by the Province or the Municipal authorities, according to the average number of pupils attending such school during the twelve next preceding months, or during the number of months which may have elapsed from the establishment of a new separate school, as compared with the whole average number of pupils attending school in the same City, Town, Village, or Township."

The rights set forth in the Act of 1863 are protected, as is well known, by section 93 of the British North America Act, the first clause of which states that the Provinces control education but,—

> "Nothing in any such Law shall prejudicially affect any Right or Privilege with respect to Denominational Schools which any Class of Persons have by Law in the Province at the Union."

By direction of the statutes, section 6, Department of Education Act, the sums to be appropriated by the Legislature for elementary education are voted under three general heads:—

(1) Votes to urban public and separate schools.

(2) Votes to rural public and separate schools, Counties.

(3) Votes to rural public and separate schools, Districts.

Under these headings, the following sums were voted for the fiscal year ending October 31st, 1921:—

Urban Schools		$197,000 00
Rural Schools, Counties	$1,100,000 00	
Treasury Board Order	555,000 00	
		1,655,000 00
Rural Schools, Districts		460,000 00

On the basis of the average attendance in these groups of schools the sums voted were divided between the public and separate schools as follows:—

URBAN SCHOOLS:

Public Schools	$161,540 00
Separate Schools	35,460 00
Total appropriation	$197,000 00

RURAL SCHOOLS, COUNTIES:

Public Schools	$1,514,490 50
Separate Schools	140,509 50
Total appropriation	$1,655,000 00

RURAL SCHOOL, DISTRICTS:

Public Schools	$420,946 00
Separate Schools	39,054 00
Total appropriation	$460,000 00

Note:—The total amount of grants actually paid to the elementary schools differs from the amount voted by a few thousand dollars. This is due to the fact that there are some trifling expenses charged against the legislative vote, such as printing of statistical returns, etc., and a small amount of money is always kept on hand to provide for adjustments of grants. On the Separate School side of the account, moreover, a portion of the grants goes back to Consolidated Revenue, because some schools are not obeying the law and cannot legally be paid.

The amounts named in this statement belong respectively to the public and to the separate schools and had to be distributed by the Department of Education each to its own class of schools. There is no warrant for either increasing or diminishing the proportion to be given to public schools or to separate schools, and such has not been done.

The statutes and regulations governing the distribution of the sums voted in support of elementary education among the schools of the Province are the same for public and separate schools. The regular procedure is first to divide the total sums into two parts as directed by the law. The regulations are then applied. As an example, take the vote to rural schools for the year 1921, which was $1,655,000.

This sum was divided on the basis of the average attendance in the schools between the public schools and the separate schools. The former's share being 91.51% or $1,514,490.50, and the latter 8.49% or $140,509.50. The share belonging to each class of schools was then distributed among the individual schools of the class in accordance with regulations which have existed for many years. These regulations take into account such factors as salaries paid to teachers, accommodations, equipment, grade of teacher's certificate, teacher's experience, and

assessment of school section. In this distribution, the public schools absorbed their total apportionment; but on the same basis the separate schools absorbed only $70,863.71 of their total apportionment of $140,509.50, leaving a balance of $69,645.79, or practically 50%, which unquestionably belonged to and had to be distributed among the separate schools. The balance of the allotment for the rural separate schools was distributed pro rata among these schools as provided for in the regulations. The procedure in making the distribution is the same in every detail as that which has been followed for several years. The sections of the regulations which provide for a second or pro rata distribution are not new. From time to time they have been applied to public schools as well as to separate schools when balances have remained unabsorbed. For example, the public schools in 1919 received a 9.5%, and in 1920 a 47% pro rata increase in unabsorbed grants.

The operation of the factors determining the distribution has always given rise to inequalities in the amounts awarded to different schools. The disparity which has been complained of between the grants paid to certain rural separate schools compared with those to neighbouring public schools is, therefore, not a new condition. It has been in existence for years. An examination of the records as far back as 1917 shows that the same schools now cited afforded illustrations of these inequalities from year to year. The inequalities are greater now because the Legislature has made more generous appropriations to elementary education, and the separate school share has been proportionally increased as the law requires.

The increases in the Legislature appropriations for rural schools which have taken place during the past two years have, indirectly, possibly been the chief cause of directing attention to disparities which previously existed. These appropriations were $750,000 in 1919, $1,000,000 in 1920, and $1,655,000 in 1921. The last two increases are the only changes that the present Administration is responsible for and the appropriations have been increased in order to pay in full the grants earned by boards under the regulations established by previous Administrations.

The inequalities can be traced in general mainly to two causes: First,—The total sum of money appropriated by the Legislature for elementary schools is provided for, as has been pointed out, by votes to three different classes of schools—Urban Schools, Rural Schools in Counties, and Rural Schools in Districts—and funds cannot be transferred from one class to another for the purposes of levelling up, even when the proportion of the number of public to separate schools is found not to be constant in all three classes. Second,—While the total sum of money voted for elementary education is apportioned to public and separate schools on the basis of average attendance, the distribution of these sums to individual schools is determined by statutes and by regulations which take into account, not average attendance, but other factors, such as salaries paid to teachers, value of equipment, character of the accommodations, grading of teachers' professional certificates, length of successful experience, and the amount of municipal or school assessment.

The grant per pupil calculated on the basis of the total average attendance of pupils enrolled in either the urban or the rural public schools is exactly the same as the grant per pupil on the total average attendance of pupils enrolled in the corresponding class of separate schools, but, because there may be differences both in the number of pupils assigned to individual teachers and in the factors which determine the grants to be paid to the schools, the grant per school may

differ widely in either class of schools. But if one separate school has received more money than it appears to be entitled to as compared with a public school in the same locality, it has received this money at the expense of some other separate school and not of the neighbouring public school. Not one cent of money which belongs to the public schools has been taken away from them for the purpose of paying higher grants to separate schools, and not one cent of money has been given to separate schools over and above what the law guarantees to them.

The statutes and regulations governing the distribution of grants among the schools were framed by the former Governments with the sole aim of bettering educational conditions. The largest portion of the grant has been distributed on the basis of the salaries paid, because experience has shown that well-paid and well-trained teachers, with inducements to remain in the continuous service of one school, form the chief factor in rural school improvement. But as no scheme of distribution can be absolutely perfect, it is doubtless true that improvements may be made in the method of distribution, with a view, on the one hand, of lessening the disparity between the grants paid to public and separate schools in the same communities, and, on the other, of a more equitable division among the separate schools themselves. The question will receive careful consideration by the Government and, if it is thought advisable, any necessary legislation will be introduced.

But it must be understood that no such change can possibly be made in the Provincial law which will affect the principles of division laid down in the Constitution.

Respectfully submitted,

R. H. Grant,
Minister of Education.

Toronto, April, 1922.

APPENDIX A

REPORT OF THE CHIEF INSPECTOR OF PUBLIC AND SEPARATE SCHOOLS

To the Honourable R. H. Grant, M.P.P.,

Minister of Education for Ontario.

Sir,—I beg leave, herewith, to submit my annual report for your consideration.

I have the honour to be,

Sir,

Your obedient servant,

Jno. Waugh.

Toronto, March 14th, 1922.

Changes in the Staff of Inspectors

At the outset it is my duty to report the death of C. B. Edwards, Senior Inspector of the City of London, on November 1st, 1921. Mr. Edwards was in many respects an ideal inspector, helpful, courteous, and systematic. He produced an organization in the schools of the City of London seldom equalled. He was a keen student of the teachers' art and had prosecuted extensive investigations, especially of school architecture and school management. He was a man of great refinement of spirit and sentiment. The fine Public Schools of the city will be a lasting monument to his memory. He was succeeded by Mr. V. K. Greer, formerly of the Stratford Normal School, and at one time Inspector of Public Schools in the County of Dundas.

In February, 1921, Inspector Thos. Jamieson, of Carleton East, died after a long illness. He had been for many years in the service of the County of Carleton as Public School Inspector. He was remarkable for his sagacity in dealing with Boards of Trustees and in seeking satisfactory settlements where serious difference of opinion had arisen. He was universally respected for the wise and conscientious discharge of his duties. He was succeeded by Mr. T. P. Maxwell, who had been a member of the staff of the Ottawa Public Schools.

Other changes in the Provincial Staff of Inspectors throughout the year are as follows:

Mr. C. McDowell, who has for several years had charge of Public Scohol inspection in the Kenora area, is to be succeeded by Mr. S. Shannon, of the Kenora High School. Mr. McDowell had done excellent service in the inspectoral area to which he was assigned.

By the retirement of Inspector Michell of Lanark, the Provincial service loses one of its oldest and most experienced officials. Mr. Michell's tact, cheerfulness and unfailing sympathy with the teachers' work had made him honoured and respected wherever he was known. He is replaced by Inspector T. C. Smith, formerly Principal of the Gananoque High School.

The District Inspectorates were redistributed in the spring term and an additional Inspector, Mr. D. T. Walkom was assigned to the Cochrane area. In view of the growth and increasing educational needs in Northern Ontario it may, perhaps, be necessary still to add an additional member to the staff of District Inspectors.

The County of York was redistributed into four Inspectorates and Mr. W. W. A. Trench was given charge of Inspectoral Division No. 3, including the villages of Markham, Richmond Hill and Stouffville.

An additional inspector was appointed in the City of Hamilton as it was found necessary to employ a great part of the time of Senior Inspector Ballard in organizing the service, for carrying into effect the Adolescent Act and the Attendance Act. Mr. A. W. Morris was appointed as an additional Inspector.

An additional Separate School Inspector, Mr. T. S. Melady, was appointed at the beginning of the present year to take charge of a Separate School Inspectorate in the Counties lying along the Georgian Bay and Lake Huron.

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The work of the present year has been largely occupied in perfecting the various educational reorganizations mentioned in my last report.

A brief resumé of the work accomplished in each is given below.

Consolidation of Rural Schools

The movement for the consolidation of rural schools has gone forward steadily and is daily gaining in public favour. A Committee of the House, consisting of the Minister of Education, Mr. Thos. Marshall, Mr. Warren Stringer, and Mr. Chas. F. Swayze, in the course of their investigations visited the Hudson Consolidated School and the Mallorytown Consolidated School exhibiting two widely different phases of consolidation. All the members of the Committee expressed themselves as enthusiastically in favour of this plan for the reform of rural education. Later in the year, a number of members of the Trustees' Association, some of whom had been hostile to consolidation, visited the Consolidated Schools at Nobel, Falls' View and Mallorytown, and these reached a similar and unanimous conclusion as to the value of this type of education. Some of the members of this latter delegation have since proved to be valuable auxiliaries in the propaganda as they were able to speak with authority of conditions which had actually come under their own observation.

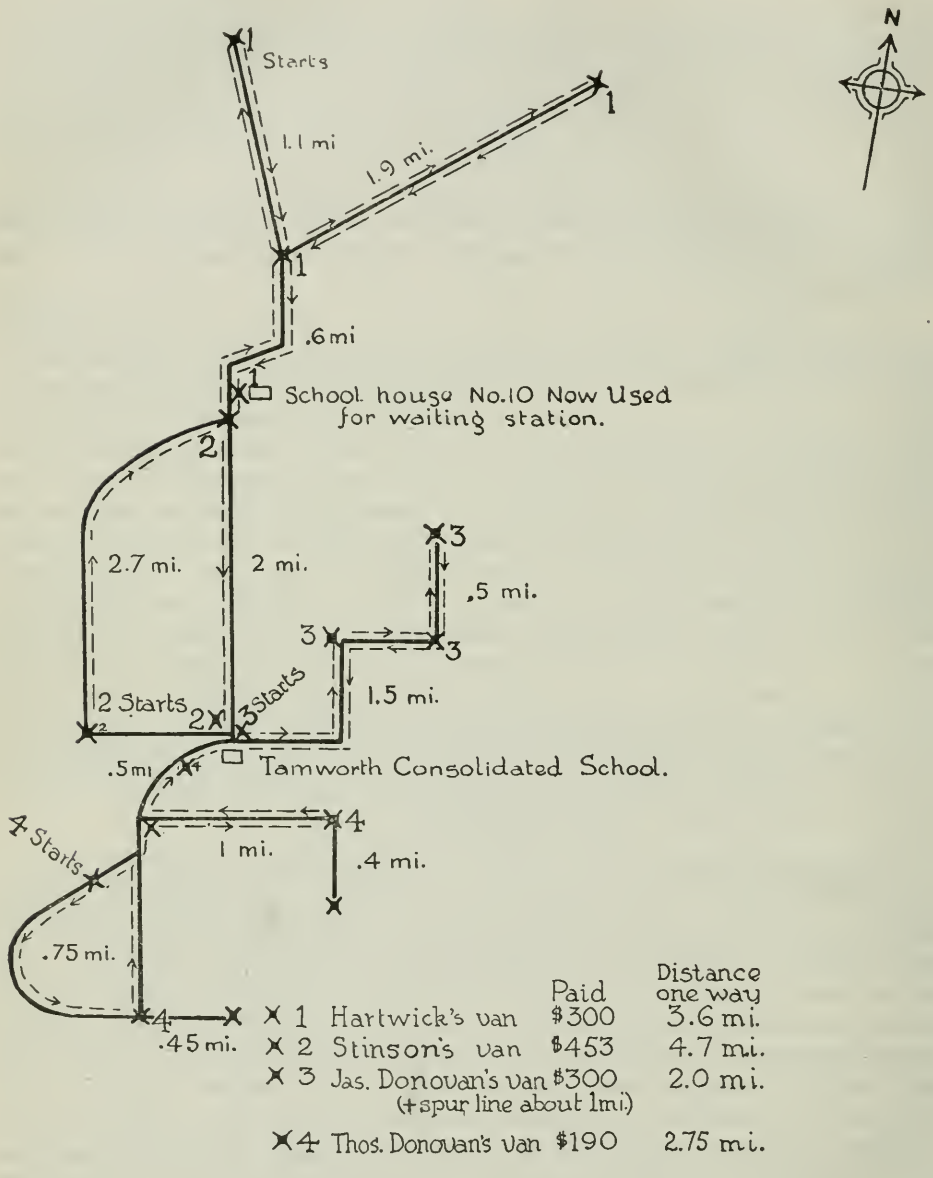
Further details of the progress of Consolidation are given in the report of Mr. Chisholm, Assistant Chief Inspector, who has had general charge of this branch and who has been ably seconded by two field workers, Mr. P. J. McLaren and Mr. J. R. Bell.

"The extensive campaign for the dissemination of information with reference to consolidation of rural schools carried on so successfully during 1920, was continued with even greater activity during 1921. More than three hundred public meetings and conferences were held by Departmental officers during the year in practically all parts of the Province. Public interest in this type of school is undoubtedly growing; speakers are given a much more sympathetic hearing; objectors, in many cases, are listened to with more or less impatience. Not only has this propaganda created a lively interest in consolidation but it has had a stimulating influence upon educational affairs in general. Many local prejudices that formerly existed in rural districts, due in part to lack of knowledge of conditions beyond the immediate local horizon, and to the great strength of the traditional section system of administration, are being dissipated. The increased interest thus aroused, if wisely directed, should lead to a substantial advance along all lines of educational reform.

"The following Consolidated Schools are now actually in operation: Nobel, Mallorytown, Morley, Falls' View (Stamford Township), Humber Heights (Etobicoke Township), Tweed, Tamworth, and Dorion. The building operations at Barwick and Mindemoya are practically completed and these schools will shortly be in operation. At Wellington the contract has been let for a fine modern school with eight classrooms. The Dominion Canners Limited generously presented the Wellington Board with a valuable lot of five acres in the village as a site for the school. At Savard the children are being transported to two of the old schools pending the erection of a central school. Burriss and Benmiller (Colborne Township) are considering plans, preparatory to building. The Tarentorous Board has been advised to defer building till a more opportune time, owing to local difficulties. The Hudson Consolidated School, which began operations in 1910, continues to give satisfaction to its patrons. The Guelph Consolidated School which was organized under the 1902 Amendments of the Public Schools Act, has made application to have the school made subject to the provisions of the present Consolidated Schools Act. This school continues to be, according to the County Inspector, the most efficient in the Inspectorate.

"The cost and feasibility of transportation is perhaps the vital factor in the successful operation of the Consolidated type of school. It is, therefore, very gratifying to learn from reports already received that transportation is giving satisfactory results. Motor trucks and waggon-vans are used except during the winter months. In some cases, as at Nobel and at Mallorytown, one motor-van serves two routes, usually a long and a short one. Transportation is ensuring a greater regularity of attendance. The Principal of the Mallorytown School states that on October 12th the most disagreeable day in the Fall term, not one of the pupils conveyed to school in the vans was absent on account of the inclement weather; all were dry clad. Parents should not lose sight of the great moral advantage of having the children going and coming under the care of a responsible driver. The authority of the Principal, of course extends from the time the pupils leave home in the morning until they reach home in the afternoon. Transportation is as much a part of the school system as any other phase. Therefore, it should be under complete control of the school authorities at all times. Transportation costs are much more reasonable in every case reported than the estimates submitted at the time of consolidating."

The following sketch shows how transportation is handled at the Tamworth Consolidated School:—



		Paid	Distance one way
X 1	Hartwick's van	$300	3.6 mi.
X 2	Stinson's van	$453	4.7 mi.
X 3	Jas. Donovan's van (+spur line about 1mi.)	$300	2.0 mi.
X 4	Thos. Donovan's van	$190	2.75 mi.

Medical and Dental Inspection of Schools

During the past year School Medical and Dental Inspection, School Nursing, Health and Physical Education and School Hygiene generally have been receiving an increased share of attention. The Department of Education has, through the Division of School Hygiene, been attempting to awaken the attention of educational authorities to the significance of the fact that mental retardation and physical abnormality are often closely associated.

The staff of the Division now numbers seven full-time physicians and twelve nurses under the direction of a Medical Director and Chief School Nurse. These have been largely occupied throughout the year in carrying on local surveys in various portions of the Province, Middlesex, Lambton, Welland, Elgin, Oxford and Dundas having been covered, and Huron, Wellington, Brant, York, Simcoe, Durham and Carleton partially completed. The object of this survey is to offer the rural and small urban schools some form of Medical Inspection, and in so doing to arouse a keener interest in the need for permanent school health supervision. In carrying out the end in view, the survey staff are effectively seconded by the School Nurse Demonstrators, five in number, who, following the survey, carry on a demonstration of school nursing in a selected area for a period of two or three months, to show the possibilities of, and the advantages to be derived from, a permanent and efficient system of School Medical Inspection. As a result of this work, twelve rural units have been fully organized; Trafalgar Township, with Milton and Oakville in Halton County, was the first of these organized units. The larger portion of Welland County is now covered by a school nursing service consisting of three units. Peel has two, York three, Simcoe, Huron, Dundas and Wentworth one each. There seems every prospect that the Counties of Essex, Renfrew, Elgin and Oxford will shortly inaugurate a school health service.

In the units already operating, much satisfaction has been expressed at the service rendered by the school nurse. In the districts to which reference has been made, no great difficulty has been encountered in carrying out the plans for this work.

Much useful propaganda work has been accomplished by the staff in other portions of the Province and they have been able to supplement the efforts of the local Inspectors to improve school sanitation generally, throughout the Province. Through the instrumentality of the school health service it has been possible to render valuable assistance in remote localities where there are no physicians available in the fight against infectious diseases and where, without this timely aid, much loss of life might have ensued. In response to the call of the Department for improvement, nearly all of the sixty centres, where some form of school nurse service is in operation, have adopted the plans and methods approved by the Department and will, on the completion of a specified period, be entitled to share in the liberal Legislative grants now made with a view to perfecting this branch of educational activity.

About 72,000 children have been examined by the Departmental physicians throughout the year 1921 and a great many facts of interest have been discovered. While it is not possible to give all the findings, it is thought that the following will serve a practical purpose. Some 8,564 were found to have defective vision, 1,707 defective hearing, 48,913 decayed temporary or permanent teeth, 48,260 had never been successfully vaccinated. These striking facts challenge attention and indicate the great need for the extension of school health service to every part of of the Province if the children are to have a fair start in life.

While much has been done within the last year, it is hoped that still greater progress will be reported at the close of the coming year, especially along the lines of physical education and health teaching.

Co-operation with other organizations

Senior Red Cross.

The Department of Education has received very material assistance throughout the year from the Ontario Division of the Canadian Red Cross Society, who financed the appointment of two additional School Nurse Demonstrators in Dundas County. These nurses have completed a survey of the county which cannot fail to be of assistance in the general movement for school health.

Junior Red Cross.

The service of the Junior Red Cross in our schools on behalf of health and citizenship merits a special word of approval. This educational activity of the thirty-eight national organizations united in the League of Red Cross Societies has helped greatly towards the recent world-wide emphasis on the need of caring for the health and training of school children.

In Ontario the Junior Red Cross Committee, working in the closest co-operation with our School Health Division has directed its efforts to helping teachers to substitute the so-called project method of teaching for those methods which had hitherto prevailed. Four issues of interesting and inspiring publications have been sent to all schools for the instruction of pupils and teachers in this matter. The result has been that in many schools the subject of School Hygiene has been vitalized into a new school-activity in health. Children have become active partners in health improvement instead of being the passive recipients of formal instruction. Many teachers have come to realize that successful instruction in Hygiene is to be measured in good growth and well established good health habits. The Junior Red Cross is making a distinct contribution to the cause of education in training our young citizens for service.

The School Nurses find the Junior Red Cross Auxiliaries very helpful to them in their work. Between their visits they have in these Health Clubs enthusiastic assistants to carry out their instructions and recommendations.

Women's Institutes.

The Department of Education has to acknowledge gratefully the assistance of many branches of The Women's Institutes in directing attention to local needs. In nearly all branches of the educational service they have given the Department sympathy and practical support. Their lecturers have taken care to inform themselves as to the best plans of co-operation with this Department and have been of special value in extending the work of the school into the home.

National Committee of Mental Hygiene.

The services of Dr. C. K. Clarke, Dr. Eric Clark and Dr. Hincks were secured to assist the auxiliary class division in carrying out plans for the organization of auxiliary classes in many of the urban districts of the Province.

Auxiliary Classes

The work in connection with the organization of these classes has gone forward rapidly, as will be shown in the Report of Dr. Sinclair, who, during the past year, has shown great zeal and ability in the organization of this type of school.

Educational Problems

Some of the problems with regard to education in the outlying parts of the Province, which had become acute through the rapid development, especially of the forest and mining industries and of agriculture, were suggested in my previous report. The situation has been ably handled by the District Inspectors as will be shown by the following extracts from the report made by Dr. J. B. MacDougall, Assistant Chief Inspector for Northern Ontario.

Northern Ontario

"The Districts cover an area one thousand miles in length from east to west and varying from two to four hundred in width or somewhat over three hundred thousand square miles. Much of the central portion is unpeopled and sparsely settled. Problems innumerable and varied present themselves, due to natural expansion, scattered settlement, lack of municipal organization, diverse forms of land-holding and primitive conditions of living and travel. But to these the Inspectors have applied themselves with a vigour and self-denial which cannot fail of success and of which the fruits are everywhere in evidence.

As settlement grows the burdens have been equalized from time to time by the addition of new Inspectors and a readjustment of territory. During the past year one new inspector was appointed in the person of D. T. Walkom, B.A., former Science Master in Sault Ste. Marie High School. He took charge of the northern section of Timiskaming from the town of Hearst on the National Transcontinental to Swastika on the Ontario Government Railway, a distance in direct line of over three hundred miles. This inspectorate comprises the remotest and most recently settled territory in the Province. Its oversight is complicated by problems of isolation of homes, primitive road conditions, limited resources and racial admixture, yet it holds an enviable standing in many factors fundamental to progress. The average salary for one-room rural schools is over one thousand dollars and for all classes of rural schools almost thirteen hundred dollars in this Inspectorate, and though rural living conditions are necessarily unattractive, it is gratifying to find but fifteen untrained teachers in a total of seventy-eight.

Prior to last year the border lands of Old and New Ontario were joint District and County Inspectorates. These were dissociated and each class of territory was made self-contained.

The following outline sets forth the more distinctive features of the past year.

1. Salaries.

These have made a perceptible advance in every Inspectorate. The increase ranges from $18 to $116 in one-teacher rural schools and from $40 to $129 in rural schools of all classes. The general average for the Districts in rural schools is now well over one thonsand dollars. Much is due to the revised schedule of grants recently adopted which gives special support to the weak and encouragement to all.

2. Certificates of Teachers.

The maintenance of salary standards has been reflected in the qualification of teachers. A comparative study of the conditions for the past three years reveals a steady advance. This year an appreciable improvement is again recorded. There were 1381 teachers in the Districts, of whom 561 belonged to the urban

and 820 to the rural schools, an increase of 80 over last year. Although this increase was largely in rural settlements, the larger part is represented in the higher grades of teachers. Temporary certificates are steadily declining and the wholly untrained teacher promises early to disappear.

3. Consolidation of Schools.

Three new buildings were completed in Northern Ontario in 1921, viz., Nobel, in the Parry Sound District, and Morley and Barwick, in the Rainy River District. Two more were under construction at the close of the year, viz., Dorion, in the Thunder Bay District and Mindemoya on Manitoulin Island. These cost $150,000 and are representative of the best that can be supplied in structure, heating, sanitation and equipment. In all six of the consolidated schools already established in the Districts of Northern Ontario, educational improvement was immediately reflected in the average of attendance, and in the staffing with teachers of the highest grade and approved experience. In Morley consolidated school ten Entrance graduates returned to pursue higher studies, thus proving that rural pupils are suffering from lack of that opportunity which consolidation provides. Three additional consolidations were organized, at Nipigon in Thunder Bay District and in Glamorgan and Cardiff Townships in Haliburton."

Northern Academy

It will be interesting to follow the fortunes of the Northern Academy throughout the last school year. It will be remembered that my last report indicated that the Academy was then still passing through an experimental phase. The results subsequently attained have, I think, amply established the hopes entertained for its future and have given it an assured place in the future development of education in the Districts as the following extracts from the report of Principal Johnson clearly demonstrate:

"The Northern Academy is situated at Monteith on the Temiskaming and Northern Ontario Railway, two hundred and eighteen miles north of North Bay and thirty-three miles south of Cochrane. This gives it a central location to receive pupils from along the T. & N. O. and the Transcontinental Railways.

The Academy is situated on twenty-four acres of land lying along the Driftwood River, which was originally part of the Demonstration Farm. The main building, built to accommodate the Soldiers' and Sailors' Training School, has been remodelled for dormitories, dining-room and class rooms.

The Academy opened in January 1921, with twenty-three pupils, but this number increased before the end of the term to forty-one, twenty-seven of whom were in the First Form High School, three in the Second Form and eleven in the Public School. Practically all of the High School pupils would have received no further education than is obtainable in the Public School had it not been for the opening of the Academy.

Early in the season there were indications that the attendance would be greatly increased when school reopened in September. On account of the limited accommodation the school was able to accept only one hundred and one, and has been compelled to refuse admission to about thirty-five. There are nineteen in the Public School, seventy-two in the Lower School and ten in the Middle School. There are thirty-eight boys and sixty-three girls ranging in age from ten to twenty-two.

The pupils come from all parts of Northern Ontario; from Hearst to Low Bush on the Transcontinental, all along the T. & N. O. Railway to North Bay, and west to Foleyet in Algoma.

The fees are such that the majority of pupils are able to make payment. There are cases however where the parents are unable to pay. Under such circumstances they are given board and tuition free under an agreement to teach in the Districts.

The primary object of the Academy is to prepare teachers for Northern Ontario, although pupils preparing for the university are admitted when there are no applicants for the Teachers' Course. About seventy per cent. of the pupils in attendance at present are qualifying for the Normal Entrance.

The High School work is carried on in much the same way as in the ordinary High School, although owing to lack of accommodation certain activities are restricted. Household Science is taken up in a practical way entirely. No classes are held in this subject but all pupils are required to look after their own dormitories, do laundry work, clear and set tables, wash dishes and when opportunity permits assist in the preparation of meals. All this is under the direct supervision of a thoroughly competent housekeeper.

The Agriculture option is carried throughout the school. Small school plots are not attempted but the practical work is done on a large scale, the pupils using the Academy Farm and the adjoining Demonstration Farm as their laboratory. On our own farm vegetables and grains were raised over and above the amount required for our own use. Hogs, poultry and bees are kept on the Academy Farm—these in conjunction with the cattle, sheep and horses of the Demonstration Farm provide ample material for the practical work in live stock.

Musical education at present is perforce neglected to a large extent. Although a large number of pupils are anxious to take music lessons we are unable to accommodate them. In the near future, however, when the present building programme is completed, special attention will be given to this subject. Considerable attention is given to choral singing and an orchestra is being formed.

The physical education of the pupils has been an important consideration. Although there is no gymnasium, this fact has affected us only in bad weather as the campus provides every opportunity for outdoor sports, baseball, basket-ball, football and hockey being played according to season. All of these games have been organized and supervised by an energetic instructor. Inter-year games were organized and teams entered in a school league in the district. A Field Day was held and all events were keenly contested although it was the first of its kind ever witnessed by the majority of the pupils. A large outdoor rink was built this winter and is in constant use. Weather permitting, the pupils are allowed a half-hour of skating between study and bed time, that is between nine and nine-thirty.

The social and literary opportunities of residential school life are not overlooked, and Friday evening of each week is regularly set aside for an evening entertainment of some kind. These evenings are so arranged that every alternate one is devoted to a literary programme. The pupils are given every encouragement to take part, and all possible help is given them in preparation. In this way latent talent is fostered and self expression is developed. This year Canadian literature has been featured. A moving picture machine, for which we are indebted to the District Representatives of the Department of Agriculture at New Liskeard,

has been an added feature in our programmes. Alternating with these literary programmes are evenings of a social nature, devoted to games, contests, or dancing, always under supervision. These Friday evenings have become school 'institutions' and are looked forward to with genuine pleasure by the pupils.

Sunday is spent in accordance with the requirements of law and religion. All unnecessary work and play is forbidden and a quiet observance of the day is required. Two church services are held in the village, one Anglican and the other Union. All pupils attend these services unless excused at the discretion of the Principal. If possible pupils attend the services of their own denomination. On Sunday also, a Bible School is held at which attendance is general but not compulsory. On account of the diverse character of the class, doctrinal or denominational subjects are not discussed, but a thorough grounding in Sacred History and general Bible study is the aim. A half-hour of hymn singing follows the Bible Class. This, though only a voluntary service, is very popular and is of value as an opportunity for choral work and hymn study.

In view of the fact that a large percentage of the settlers coming into Northern Ontario are French it is advisable that the teachers in our Public Schools should be able to speak French. To this end conversation French is taught. We have been fortunate in securing a teacher whose native language is French to take up this branch of the work.

On account of the crowded condition in every department there has been little opportunity for work of an experimental nature. Some work has been started in connection with the correlation of certain Public School subjects with the corresponding subjects in the High School, and before long some interesting results should be available.

One of the great problems we have is the many stages of advancement at which pupils come to us, especially in the Public School. Owing to the isolated location of the homesteads and lack of roads, the children have been practically without any schooling, and we have received boys of fourteen and fifteen, who were unable to read or write.

The prospects for next year, so far as attendance is concerned, are most encouraging. Already we have applications from about thirty prospective students and as the limit has been set at one hundred and fifty, the prospects are that we shall reach the limit before school reopens in September."

Victoria Industrial School

A review of the conditions at the Victoria Industrial School was made last year by a commission. This report, which is now in your hands, indicates that a complete reorganization of this institution is imperatively necessary, and suggests that the school should be brought into closer relation with the Provincial Government in order that it may form an integral part of the system of education. This institution has a direct and immediate relation to the Auxiliary Class problem and to the complete enforcement of the School Attendance Acts; and any reorganization should take both these factors into account. It is earnestly hoped that steps will be taken to deal with the situation without delay.

The Assisted School Fund

A rapid development in education throughout the year has brought into action, the resources of the Assisted School Fund to a greater extent than ever before. An attempt has been made to distribute this fund,—

1st. For the purpose of equalizing the educational burdens of the different communities and,

2nd. For the encouragement of Trustees in providing new or increased educational facilities in their schools.

It will be necessary during the coming year to make even larger calls on the Assisted School Fund and an attempt will be made to equalize still further the load through its agency. Of course, the great difficulty in using the fund for this purpose, lies in the fact that the assessment of the various school sections lacks any semblance of uniformity.

An assessment of $100,000 in one part of the Province may mean anything from an assessment of $60,000 to an assessment of $150,000 in other parts. The School Inspector, however, who has come into close relation with the life of his constituency, should be a good judge of the fairness of the assessment and should be able to assist the Department in reaching an equitable basis for the distribution of special assistance.

School Accommodations

Reports received from various parts of the Province seem to indicate that there is need for serious reform in the sanitation and ventilation of many of the schools. The water supply is frequently found to be unfit for use, and sanitary conveniences, lighting, and seating accommodation are often wholly unsatisfactory. The public generally does not seem to be fully aware of the gravity of these conditions, and every effort should be made by the Public School Inspectors to see that the school buildings and premises are clean and tidy. A specific effort should be made to see that every school is provided with a proper supply of drinking cups, towels anl basins.

Where the school well does not yield a satisfactory supply of drinking water, or where the water is tainted or shows evidence of possible pollution, it may be well to advise putting in a drilled well, properly protected from contamination. This is much more sanitary than the ordinary dug well and much more easily kept clean and free from contamination.

Teachers and Qualifications

A few figures are given below which will indicate the rapid growth in the supply of teachers and the advance in their qualifications since 1916.

Year.	Total.	I.	II.	III.	Lower Grade.
1916	12094	1084	8559	1346	1105.
1917	12315	1106	8784	1317	1108
1918	12490	1099	9018	1247	1126
1919	12855	1246	9193	1159	1257
1920	13318	1303	9544	1160	1311
*1921	13582	1299	10177	1001	1105

* Estimated from returns received from Inspectors.

The above table shows an increase in the number of teachers within the five-year period of 1,488 or 297 per year. An examination of the table will show that the gains made are in the columns showing the numbers of teachers holding First and Second Class certificates. During the five-year period, the number of teachers holding First Class certificates was increased by 215; the number of teachers holding Second Class certificates was increased by 1,618; the number of teachers holding Third Class certificates was reduced by 345; the number of teachers holding Lower Grade certificates was in 1916, 1,105, and was increased in 1920 to 1,311, falling again to the original figure of 1,105 in 1921.

In estimating the gains made it is always important to remember that teachers of the First Class are being drawn off from year to year for service in Continuation Schools.

No more convincing proof of the steady increase in numbers and qualifications of the teachers could be given than is furnished by this table. It does not seem unreasonable to expect that within a few years it will be possible to announce that for every school in the Province of Ontario there is a qualified teacher available. In the meantime, it may be fairly said that the exodus of teachers from Ontario to the other Provinces is at an end.

Relative Cost of Education in the Different Provinces

Some interesting figures are given in the report of the recent convention of school trustees held in Saskatchewan. These figures show that in the year 1919, the cost per pupil in the publicly controlled schools in the various Provinces was as follows,—

Saskatchewan	$60.79.
British Columbia	58.73.
Alberta	52.89.
Manitoba	46.34.
Ontario	38.73.
Quebec	34.65.
New Brunswick	21.54.
Nova Scotia	19.60.
Prince Edward Island	16.25.

The very considerable increase in the school grants paid in Ontario since that time has resulted in large advances in the salaries paid teachers and this would greatly modify these figures so far as this Province is concerned. But even these advances would fail to justify the criticism sometimes made by the uninformed that the costs of education here are excessive. In 1920, a year later, the cost per pupil in Ontario was still only $47.57.

Visual Instruction

During the year an attempt has been made to discover the value of the moving picture machine and the projection lantern as agencies in education. The projection lantern has found a definite place in the school room and has been used for educational purposes with success for many years. The moving picture machine, whilst it has clearly established itself as a medium for propaganda, has not yet been fully accepted in the ordinary teaching exercises of the school; and it will, perhaps, require some years of careful experiment before the proper method of introducing and handling the moving picture in the class

room is discovered. In the meantime, it seems quite clear that for the purpose of suffusing a subject with vivid interest and for the purpose of fixing experiences in the memory, the moving picture machine is one of the teacher's most valuable auxiliaries.

The Department of Education hopes, during the present year, to add to the stock of moving pictures already in its possession, the following,—The Consolidation of Rural Schools, The School Garden, The Play Ground, The Gymnasium. The two latter will be used for their value in connection with the organization of physical education, the other two in the furtherance of the community movement through the medium of the schools.

Inspection of Schools

The appointment of Dr. Karr as Director of Organization of Rural Schools and Mr. Neil McDougall, of Petrolia, as General Inspector will make it possible to give a greater amount of assistance to the Public School Inspectors in carrying on their work.

I am glad to report that the Inspectors in general throughout the Province are giving valuable assistance to the Department in carrying out the various branches of the reorganization now in progress. This has especial reference to the consolidation of rural schools, medical and dental inspection, agricultural education and community organization.

While it is not intended and is not practicable for the Public School Inspector to become responsible for the professional training of teachers, it is still his duty to give such encouragement, direction and advice to the teachers as will enlarge their conception of the work they have to do and stimulate them with a zeal for doing it. This is indeed the most essential part of the work of the Inspector. It is of far more importance that when the Inspector leaves the school he shall have left behind him a new and better insight into the purposes and methods of education than that he should have sedulously fulfilled the more formal part of his duties; and it is safe to say that the man who does the first is not likely to neglect the last.

Teachers should be given every encouragement for the display of initiative. It is always to be remembered, however, that unalloyed liberty is, perhaps, the most doubtful of all blessings. Teachers are to be found, who, if left to their own devices, would devote the greater part of their time to some subject in which they are especially interested. To allow such a teacher to follow his inclinations is to place his school under a serious handicap. The natural aptitude of the pupils has a right to recognition as well as the natural inclination of the teacher; and whilst due allowance should be made for both, both should be regulated. It is worth while to observe that studies for which the child has little natural aptitude may be an admirable means of salutary mental discipline by bringing into play sets of faculties which would otherwise be neglected. A state system of education must always place the emphasis of attention on well balanced attainments, character and personality and it is just at this point that the tact and experience of the Inspector are properly called into play.

Regulations and Courses of Study

There is some misconception of the privileges granted by the Regulations in respect especially to the latitude permitted in organization and management

of the public schools. Trustees and Inspectors, for example, are given the widest possible powers in dealing with the subjects of the course of study in Group III and certain powers are conferred upon Inspectors in connection with the course of study in Group II (see page 38 of the Public and Separate Schools Regulations).

In London and Windsor new methods of organization of city schools are being successfully operated without any departure from the spirit and intention of the Regulations. In any case,where, in the opinion of the Inspector, the operation of the present Regulations does not allow sufficient freedom to local authorities he should call the attention of the Department to the condition, giving in full his reasons for any change which he may have to suggest. As a further illustration of the degree of latitude allowed by the Regulations in regard to Courses of Study, it may be pointed out that although certain courses in the Forms are divided, each into a Junior and Senior Grade, these grades may be combined or a different division may be made by the Principal. In other words, the whole aim of the Regulations has been to give every reasonable latitude to the local educational authorities in arranging the organization of their schools. The opposite view can be held only by those who have never taken the trouble to inform themselves of the successive changes which have been made to bring this about. Further changes in the Course of Study may be necessary. It may for example, be found possible to eliminate the formal study of Arithmetic in the Junior Grade of Form I, and to have this subject taught in this Grade as merely incidental to the other subjects and school activities. The present Regulations, however, are already wide enough to allow this, as the Principal is allowed to make such a distribution of the work of the Junior and Senior Grades in any Form as he may consider advisable.

The issue of new text-books in Geography and History will necessitate some modifications of the Course in these subjects and the time has come for a readjustment of the relations between the Course in Nature Study and in general Agriculture.

APPENDIX B

REPORT OF THE DIRECTOR OF INDUSTRIAL AND TECHNICAL EDUCATION

To the Honourable R. H. Grant,

Minister of Education for Ontario.

Sir,—

I have the honour to submit herewith my Annual Report on Industrial and Technical Schools.

I have the honour to be, Sir,

Your obedient servant,

F. W. Merchant.

Toronto, March 18th, 1922.

The First Decade in the Growth of the Industrial and Technical Schools

The Industrial Education Act under which the Provincial system of industrial and technical education has been operated was passed in 1911. We have, therefore, reached the end of the first decade in the development of these schools. The growth during this period has been remarkable. The number of schools has increased from one day school and eight evening schools with an enrolled attendance of less than 4,000 pupils in 1912, to thirteen day schools and fifty-one evening schools with an attendance of approximately 32,000. Over one thousand teachers are now engaged as instructors in these schools.

Growth in Expenditures by Municipalities

The increasing popularity of the schools is shown by the willingness of municipalities to provide funds for the maintenance of this type of education. The following tables indicate the expenditures made by municipalities on day and evening schools during the period for which special returns have been made to the Department of Education.

Year	Total
1913-14	$ 111,117 94
1914-15	123,091 01
1915-16	171,989 81
1916-17	229,147 33
1917-18	493,199 86
1918-19	659,072 82
1919-20	1,347,905 04

Growth in Expenditures by the Province

These expenditures have been stimulated and made possible, in a large measure, by the liberal grants appropriated by the Legislature for technical education. The following table shows the expenditure by the Department from the opening of the classes in 1911:—

Year	Total Grants
1911-12	$ 5,380 26
1912-13	37,128 48
1913-14	56,235 10
1914-15	54,611 78
1915-16	58,192 65
1916-17	65,024 54
1917-18	95,781 48
1918-19	125,984 41
1919-20	578,933 34
1920-21	565,287 25
	$1,642,559 29

The large increase in expenditure in the year 1919-20 was due to the fact that the basis for the distribution of grants to municipalities was changed, and Provincial assistance was given boards to help them to meet expenditures on capital account as well as for maintenance. This was made possible by the subsidies in support of technical education received from the Federal Government in accordance with the provisions of the Dominion Technical Education Act of 1919.

Progress in Adjusting Courses to Meet the Needs for Vocational Instruction

But the most important advance is shown in the progress that has been made in adjusting the organization of the schools to meet the need for vocational training. The schools had their origin in a demand which grew out of a wide-spread belief that the youth of the country, through their school education, should receive some direction and a measure of special preparation for their life-work. But it is one thing to recognize such a need and quite another to develop constructive plans for an educational organization which would bridge the gulf which existed between the schools and employments.

Naturally, the plans to be adopted were, in the beginning, subject to trial and revision, and progress in permanent advance was necessarily slow. The academic schools have become more or less stereotyped in respect to their objects, types, organization, and courses of study; and it is a comparatively easy matter to maintain these schools and to provide for necessary improvements along lines which are more or less definitely fixed. But the organization of a new type of school with different aims and requiring special courses of study and training presents new problems involving greater difficulties.

Problems in the Organization of Vocational Schools

The necessity for such schools has grown out of changed conditions. In the past, vocational training in commercial and in industrial vocations was provided for mainly through the apprenticeship system, which proved, in its day, to be a most efficient means of instruction. But with higher specialization in the processes of manufacture and with the organization of larger industries on a basis

for economic quantitative production, the apprentice system has broken down and we find ourselves now in a period of reconstruction which has created a demand for making vocational training a specialized service and for placing the responsibility for it on schools organized as a part of the national system of education.

The organization of these schools, then, has introduced many new problems. Take, for example, the construction of courses of study and training. The academic teacher in the ordinary secondary school has the course of study in his department fixed for him and all that he is required to do in his instruction is to follow the details. But vocational teachers have been handicapped in this respect because there has been no source from which they could derive information regarding the details of knowledge which a workman in any trade should possess. There is also a decided lack of available information regarding the operations in which a workman in any trade should receive training in order to be a skilled operator in that trade. To take an example: What should a plumber know of fluid pressure and movement, properties of metals, and of other principles of physics and chemistry, and in what mathematical calculations should he receive instruction, and in what mechanical operations should he be trained in order that he be an intelligent and efficient worker? These requirements are not laid down anywhere in a course of study.

To determine the requirements in specialized knowledge and in mechanical operations for a variety of important trades and to formulate courses of study has been one of the serious problems confronting us in the organization of vocational education. It has been found necessary to make a job-analysis of each separate trade in order to find out the character of the related knowledge and the requirements on the practical side. Further, it is necessary to analyze the material thus secured for each trade and to organize it for presentation to students in accordance with the principles of teaching.

Other problems as well have faced us. We have had to determine the occupations for which it is feasible and profitable to provide school instruction, to study the accommodations and equipment necessary for such schools, and to find means for selecting and training competent teachers for special service in vocational schools.

Progress in Solving the Problems of Organization

But we have made considerable progress in solving these problems, and the real and permanent advance in our work is measured by our success in this direction. The schools are finding for themselves an established place in the educational system of the Province. On the industrial side, they are providing for the young people who are to enter industry the essentials of a good academic education and, at the same time, furnishing a special training in the subjects and operations which are fundamental to the trades and industries in which they are to be employed.

The Necessity for the Restoration of Apprenticeship Agreements in Co-operation with Vocational Schools

But our experience is showing that too much is sometimes expected of such schools. I have observed with a great deal of care during the last ten years the development of our own schools and I have had opportunities of studying at fairly close range the operations of the more important trade schools both in America and in Europe, and I am convinced that a school alone cannot

equip fully a youth as a journeyman in any trade. I am convinced also that some form of apprenticeship should be restored, in which the school and the shop both take a part in the instruction of the apprentice. The function of the school should be to give instruction in the related knowledge and the operations fundamental to an industry, while the apprentice perfects his skill and develops his industrial intelligence at work in industrial establishments under productive conditions.

Progress in Organizing Apprenticeship Systems

Wide-spread interest is now being awakened in the restoration of apprenticeship and considerable progress has been made in establishing systems in co-operation with technical schools. An agreement entered into by the plasterers at Toronto last year requires that an apprentice shall be indentured four years and shall regularly attend night classes at the Toronto Technical School during two years of his term. An agreement in the electrical trades at Hamilton requires supplementary electrical courses to be taken at the local technical school. In the printing trade in Hamilton the apprenticeship agreement between the employers, the men, and the apprentice requires the apprentice to attend the technical school for half a day each week and six nights each month. Any extra time put in at the school shortens the period of apprenticeship. When the shops are closed due to slack times, or for other reasons, the boys attend the technical school classes full time.

The most promising recent development, however, is the national apprenticeship system of the building industry, which was approved by the National Joint Conference Board at a meeting held in January, 1921, in Montreal, and which was also approved by the Association of Canadian Building and Construction Industries at its annual conference at Winnipeg in the same month. (See *Labour Gazette,* February, 1921, p. 198.). The report of the board's committee which drew up the plan, after calling attention to defects of existing conditions, concludes: "Our hope of meeting the situation lies in the revival of a well-established and defined apprenticeship system, with a very definite objective, under the supervision and joint control of our respective organizations." The above scheme was also approved by the Joint Conference of the Building and Construction Industries in Canada, which was held in Ottawa in May, 1921, under the auspices of the Federal Department of Labour.

The following are the main features of the National Apprenticeship System as approved by the Conference. It is to be directed by a National Apprenticeship Council composed of seven members, three of whom shall be employers and three of whom shall be employees in the industry. These six members, who shall be appointed by the Joint Conference Board of the Industry, shall select the seventh member who shall be chairman of the Council. Under authority of the National Council there shall be formed Local Apprenticeship Councils each composed of one employer and one employee for each trade in the industry, with one architect and one industrial engineer. The Local Councils shall carry out the objects of the Apprenticeship System. The relation of the National Council to the Local Councils shall be advisory, except in respect to questions or disputes which shall be referred to the National Council for decision, which decision shall be final and binding. Standard forms of indenture shall be adopted by all employers, and the employer shall bind himself to give the apprentice the fullest opportunity to learn the trade by practice and by attendance at a vocational school. An apprentice shall be bound

to attend prescribed vocational classes, and an examination board of not less than three members shall examine apprentices at stated periods. A Local Council may in certain cases cancel indentures and transfer apprentices to another employer, or may, by agreement with the employer, arrange for short periods of transfer to enable the apprentice to extend knowledge of his trade. The Local Council will assume joint responsibility with the employer for providing facilities for the apprentice to learn all branches of his trade; and it shall determine the number of apprentices necessary, and discharge other functions, all of which are fully described in the Department of Labour's Bulletin No. 3, Industrial Relations Series, "Joint Conference of the Building and Construction Industries in Canada, Ottawa, May 3-6, 1921."

The carrying out of the provisions of such agreements for instruction at vocational schools is assured by the provisions made in our school attendance laws for compulsory part-time instruction of youths under eighteen years of age.

Progress in the Development of Technical Courses

On the technical side, also, our schools are finding a field for themselves that is quite distinct from the engineering courses in our universities. The scope of such classes cannot be marked off very distinctly from the industrial courses. Our vocational courses are designed to give instruction in the mechanical operations and in the knowledge related to different occupations. Whenever the knowledge factor necessary to efficiency in an occupation becomes more important than the factor of skill, the form of training may be described as technical rather than industrial. Now, as the ratio of knowledge to skill varies with different occupations, it is clear that no sharp line can be drawn between the two types. Nor do we attempt to draw such a line because, with very few exceptions, both types of instruction are provided for in the same school, but, as a rule, in different classes.

The exact sphere of the work of our technical schools can scarcely be prescribed in a detailed outline. It will be best understood by illustrations taken from some of the typical fields in which instruction is being provided.

Technical Courses in Steam Engineering

A host of men find employment in charge of the operations of steam plants of varying degrees of complexity from the simplest heating installation to the largest and most complex power plants. These men all need a certain amount of knowledge of the properties of steam and of its applications, the amount varying with the complexity of the plant. While graduate engineers may be in charge of a few of the more important of these plants, a very large proportion of the men employed are not of this class. The specialized knowledge required by these men is set forth in the requirements of the different grades of certificates they must secure from the Government boards to hold their positions. The technical schools find here a sphere in providing instruction in this specialized knowledge. In constructing their courses of study for this purpose the schools are co-operating very closely with the authorities that prescribe the requirements and control the examinations.

Technical Courses in Electricity

A similar field for the employment of trained men is found in connection with electrical power development, transmission, and distribution. Between the requirements of persons engaged in what may be called the electrical trades, such

as house-wiring, line construction, armature winding, etc., on the one hand, and the employments demanding engineering training, on the other, there are large numbers of persons connected with the construction, the operation, the maintenance, and the testing of electrical machinery and equipment who require specialized knowledge as well as skill.

Technical Courses in Mining

The mining industries of the Province also call for the employment of men in a variety of occupations both at the mines themselves and in the mills and smelters where accuracy and efficiency is dependent upon intelligence and knowledge as well as experience. The need for the training of such men was early brought to the attention of the Department of Education and one of the first of the technical schools to be established was organized to meet this need. Two such schools have been established, one at Sudbury and one at Haileybury. Each school has had the hearty support of the engineers and mining men of these districts. These schools have provided useful training for the mining industry and have been the means of directing an increased proportion of the youth of the communities to this industry. As a rule, the graduates of the schools enter the industry as assistants in some of the departments, but many of them, with experience, come to occupy positions of responsibility.

Technical Courses for Mariners

Another field for instruction in specialized knowledge has developed in connection with the requirements of men engaged in the merchant marine service of our lakes. The demand for theoretical instruction, especially for engineers and masters and mates, has been urgent and the provisions for technical education have been taken advantage of for the organization in a number of our lake ports of winter technical courses for this purpose. Previous to the organization of such schools, men had to depend mainly upon private coaching. Here again the knowledge required, while directly of a technical character, is not covered by the general engineering courses of the university.

Technical Courses in Other Departments

I need not add further illustrations. In the industries I have named and in many others, such, for example, as the pulp and paper industry, textiles, and railway operation, there is a demand for men with training in technology of a higher grade than that required in semi-skilled or skilled work, but with requirements lower than those expected of the engineer. Roughly, this intermediate field includes men engaged in operation and maintenance rather than in design and direction. Such men require the essentials of a good secondary education and specialized knowledge, varying with the type of the occupations. Our technical schools are endeavoring to give men a theoretical and practical training for this field.

Progress During the Year

I have been referring to the general advance in technical education during the first decade. The progress made during the year has also been very satisfactory.

As usual, the evening class work has continued to expand. The records show an increased enrolment of over a thousand pupils. New schools were opened at Perth and Hespeler. The range of subjects covered by the classes has also been widened materially.

It is generally agreed that if the enrolment in evening classes is 2% of the population, the classes are meeting reasonably well the needs of the community. The enrolment at Ottawa this year is approximately 5% of the population and in a number of other places, notably Brantford, Gananoque, London, Niagara Falls, Oshawa, and Owen Sound, the enrolment is from 3% to 4% of the population. It is evident that in such places the advisory committees and the principals are providing very excellent facilities for adult education and that a very strong public sentiment in support of evening classes is being developed.

Satisfactory progress has also been made in the organization and development of day schools.

The new building at Niagara Falls, erected to provide accommodation for the vocational classes, described in my last annual report, was formally opened in the autumn of 1921. The response to the larger opportunity for training offered by this new building was most gratifying to the local school authorities. At the end of the term the enrolment in the vocational departments was as follows:—Industrial course for boys, 58; Industrial and Home-making courses for girls, 12; Commercial, 70; Total, 140.

The new wing of the Fort William Collegiate Institute devoted to technical education was opened in September, 1921. The enrolment in the industrial department for boys was 26 and in the commercial department 108.

The new technical and mining school building at Sudbury was also opened for classes in September. Here again the response to improved facilities for vocational training was most gratifying. The enrolment at the end of the term in the different departments was as follows:—Mining, 31; Industrial (boys), 27; Commercial, 39; Home-making, 12; Special Part-time Home-making, 17; Total, 126.

Any doubts as to the need of the school that may have existed in the minds of the school authorities or of the ratepayers of Sudbury were swept away by the general interest which the opening of the school aroused in the community. Two interesting features of the enrolment illustrate the principle, frequently noticed when new schools are opened, that increased facilities and improved equipment in the school system bring into the schools unexpectedly large numbers of pupils. As the school is primarily a mining school, it was not intended in the original scheme of organization to offer an industrial course for boys. Such a course, however, was provided. On the day the school was opened only one boy presented himself for enrolment in this course. The next day another applicant enrolled. From time to time other applicants appeared until at the end of September there were nine in the class. In October the number grew to 11, in November to 16, and in December to 19. On opening the school in January, there were 27 boys enrolled in the industrial course and all were attending with great regularity.

The other interesting feature was the establishment of a part-time class in home-making for young women. The possibility of such a class was canvassed, and as the prospects seemed favourable, it was advertised. The record of enrolment in this class was similar to that in the industrial class for boys. A few joined at first, then another, and another until by January there were some twenty young women enrolled. The students attended the school three afternoons a week to take cooking, sewing, house management, and home nursing. The members of the class were all young women living at home, most of whom had already received a general high school education. This was an opportunity for service of a very desirable kind which was not definitely recognized when the need for a technical school

in Sudbury was being considered. There is little doubt that in every town as large as Sudbury there is a considerable group of young women living at home who would avail themselves of such an opportunity.

It should, however, be noted that the success of these two classes was due, in a large measure, to the enthusiasm and the efficiency of the teachers in charge of these departments as well as to the excellent accommodations and equipment provided by the school authorities.

New Building Projects

Sault Ste. Marie has under construction a new building to be specially devoted to vocational education. It provides accommodation for industrial and technical classes, home-making classes, and commercial classes, at a cost of approximately $225,000. The building is being erected in a central location, conveniently situated for both day and evening classes. It is expected that the building will be ready for occupancy by September, 1922.

The erection of the new Collegiate Institute and Technical School at Sarnia has proceeded rapidly, and the building will be ready for use in September, 1922. Plans for this building are shown in my report for the year 1919, but on account of the high cost of construction, the erection of the building was postponed for a year. This postponement resulted in a very substantial reduction in the cost. This school will provide in one building for all types of secondary school education at a cost for building of $570,000.

In Hamilton, the main building which is to provide class-rooms, laboratories, administration offices, assembly hall, and gymnasium, for the technical school, is being erected this year, and will be ready for use in September, 1922. Some five years ago the first unit or shop wing of the building, was erected, and in it temporary accommodation was provided for class-rooms. This accommodation was soon found to be inadequate, and the erection of the main building became necessary. In addition to the accommodation already mentioned, the new building provides permanent and adequate accommodation for the art school. The total cost of this structure will be about $800,000.

The Technical Education Board for Windsor and Walkerville, authorized under special legislation secured at the last session of the Legislature, was organized early in the summer of 1921, and proceeded to attack with promptness and energy the problem of providing a new technical school building. It determined the accommodation to be provided, selected and purchased a site, obtained plans by a competition restricted to the architects in Windsor and Walkerville, and appointed an architect. The final plans and specifications were approved by the Department of Education in December and at the same time an agreement was signed by the officers of the board and the Minister of Education, providing for a grant on the capital cost of the building.

In the meantime, an estimate of the cost of the building, viz., $800,000, had been obtained and the respective shares of Windsor and Walkerville determined. The requisition for the money was made in October, and the money was voted unanimously by both councils in November. As soon as the agreement with the Government was signed, the contract was let, and material was being placed on the ground before the opening of the year.

When it is remembered that this board came into existence in April, and that before the end of the year they had purchased a site, adopted plans, entered into an agreement with the Government, provided $800,000, and let the con-

tract for the building it is evident that much credit is due the members of the board for the efficient and business-like way in which they discharged their responsibilities.

Plans for new secondary schools of the composite type have been prepared for St. Catharines, Kitchener, and Guelph, and the funds have been provided or promised in each case for building purposes. Actual construction of the buildings has not yet begun, but it is expected that definite action will be taken shortly by each of these places.

Some Interesting Features of the Year's Work Noted by the Organizers

The City of Port Arthur has a municipal telephone system. The management found it difficult to secure men skilled in the work of wiping telephone cables. Through the city council a request was made to the advisory industrial committee to provide an evening class in this work. A class was formed, and the men engaged in cable work attended two evenings a week to learn and practise the art of splicing, sheathing, and wiping telephone cables. Excellent work was done, and the effect was felt in the better product turned out by the men on the job.

Another notable feature of the work in Port Arthur is the advisory committee's plan for instructing helpers and apprentices in the plumbing trade. Hearty co-operation has existed between the master plumbers, the journeymen, and the apprentices attending the class. No apprentice or helper can become a journeyman until he has passed an examination conducted at the school by the Examining Board of the Twin Cities. Prizes for progress are offered by the master plumbers. The prizes for this year were presented at a banquet held at the end of the term, attended by master plumbers, journeymen, and apprentices.

In a number of places, Rotary Clubs, Kiwanis Clubs, and other clubs engaged in public welfare movements interested themselves in the evening classes. In Oshawa, for example, the Rotary Club has been very active in co-operating with the school authorities in promoting vocational classes. The evening school enrolment was increased from 73 in 1920 to 311 in 1921. In Windsor, a list of the members of the Rotary Club, with the classification of each member shown, was sent to every boy likely to leave the secondary school. Each boy was asked to mark on the list the vocation or business which he would prefer to follow, and the Rotarian connected with that vocation or business undertook to give the boy an interview, and to discuss with him the advantages and disadvantages of the vocation, the kind of preparation needed, the time of service, and the possible rewards. This is a very practical kind of vocational guidance.

In Ottawa, a leading department store engaged one of the teachers of dressmaking in the technical school to give in the store a series of ten-minute talks daily on the choice of materials and the methods of home dressmaking. In featuring in their advertisements the connection of the lecturer with the technical school, the firm paid an unconscious tribute to the value of the instruction given the pupils in attendance at it.

Summer School Courses for the Training of Vocational Teachers

The need for providing means for the professional training of teachers of vocational subjects has become urgent. During the winters of 1919 and 1920, evening classes for the instruction of teachers were held at Toronto, Hamilton,

and London, and a number of the teachers on the staffs of these schools qualified for Interim certificates through attendance at these classes. But it was manifest that the training of teachers through evening school instruction could not be extended to all parts of the Province and some more adequate means of training had to be sought. A summer school for this purpose was opened in the Central Technical School, Toronto, in 1921. The session extended from July 4th to August 5th.

Three classes of persons were admitted to the school: (1) Teachers of trade or technical subjects holding temporary certificates, (2) other persons looking forward to teaching in a vocational school, who could submit satisfactory evidence of possessing the essentials of a fair English education, and of having approved technical or trade experience in the subject they expected to teach, (3) teachers holding certificates in domestic science who wished to take the practical course in dressmaking.

Travelling expenses and a living allowance of $1.25 per diem were paid to all teachers finishing the course, provided they were teaching in one of the vocational schools of the Province.

An introductory course was provided for persons who had had no previous training in teaching and school management, and an advanced course was offered for those who had previously taken one or more of the evening school courses.

The course of study offered included (1) The aims of education and general principles of teaching, (2) Special methods of instruction as applied to vocational subjects, (3) The analyses of the related knowledge and the mechanical operations of different trades, (4) The preparation of courses of study for these trades, (5) Construction of lesson plans.

Nineteen teachers were enrolled in the first year's course for men and ten in the advanced course; forty-three teachers were enrolled in the first year's course for women and one in the advanced course.

The enrolment in the men's classes included teachers of motor mechanics, machine shop practice, draughting, electric wiring, power plant engineering, electrical testing, electrical design, machine design, and horology.

In addition to the general class work, the women took practical instruction in special methods in millinery and dressmaking. Teachers who already held certificates in domestic science took the special methods in dressmaking.

In spite of the extremely hot weather of the summer, nearly all of those who enrolled attended regularly to the end of the course, and tried the prescribed examinations. In the advanced courses, six men and one woman completed satisfactorily the courses of study, and were awarded interim certificates to teach the particular trade or subjects in which they were trained.

In the first year course nineteen men and thirty-four women completed satisfactorily the course prescribed. These teachers will be required to complete a second summer course to obtain an interim certificate.

All persons now teaching on temporary certificates in day vocational schools will be required to qualify for interim certificates by September, 1924.

Co-ordination of Types of Instruction

The Industrial Educational Act as passed in 1911, provided for vocational instruction only in industrial and technical subjects. Later, the Act was amended and its scope widened to include provisions for commercial and agricultural subjects as well.

But the plans for administration, supervision, and support by Government grants differed with the different types of instruction. The growth of each type was more or less hampered by these varying conditions, especially in schools where more than one form of instruction was offered. By the Vocational Education Act of 1921, the different forms of vocational instruction were co-ordinated, and all vocational schools and classes placed on the same basis. The passing of this Act marked another important step in the advancement of vocational education.

The Vocational Education Act of 1921

This act, which repealed the Industrial Education Act, provides for the establishment and development of vocational schools giving instruction in industrial, home-making, art, technical, commercial, and agricultural subjects. The schools may offer full-time day courses, part-time day courses, and evening school courses of instruction,

All courses are designed to give, as a basis of citizenship, instruction in the essentials of a general education and at the same time a specialized training in the subjects, processes, and operations which are fundamental in the fields of work in which young people will seek employment.

The act provides also that any municipality may establish one or more schools or departments for instruction in the subjects mentioned above either as separate schools or as departments in a secondary school. Such vocational schools or departments are to be under the control and management of appropriate advisory committees. These committees have power, subject to the approval of the Minister and of the board, to provide a suitable site or building and adequate accommodation, and to prescribe courses of study and provide for examinations and diplomas. Subject to the approval of the board, the committee may employ teachers, fix their salaries, and submit annually an estimate of the amount of money required to carry on the work of the school.

Under the Vocational Education Act and the regulations pertaining thereto, vocational schools or departments shall be entitled to annual grants to be paid out of any moneys appropriated by the Legislature for industrial, commercial, technical, or agricultural education. These grants are paid on the expenditures made for salaries, equipment, furniture, or buildings. The grants to vocational schools are, under the regulations, calculated on the same basis for all types of schools or departments.

Changes in the Staff of the Technical Education Branch

Dr. James C. Miller resigned his position as Assistant Director of Technical Education in September to accept the professorship of vocational education in the University of Indiana. Mr. F. P. Gavin, one of the organizers of the Technical Education Branch, was promoted to the Assistant Directorship. The vacancy on the staff of organizers was filled by the appointment of Mr. Milton A. Sorsoleil.

Mr. Gavin, before he came to the Department of Education, was principal of the Windsor Collegiate Institute and was generally regarded as one of the outstanding men among the high school teachers. He was specially successful in organizing industrial and technical classes. He had been an efficient member of the staff of organizers and his promotion was well merited.

Mr. Sorsoleil is an Honour graduate in English and History of the University of Toronto and a specialist in commercial work. He had given excellent service first as a master and afterwards as principal of the Normal Model School at Toronto. His appointment therefore, is also a promotion within the Depart-

ment of Education. He is a man of energy and ability with personal qualities which specially fit him for the work. He will be connected more directly with the commercial department of the Technical Education Branch.

Some Important Problems of the Immediate Future

The operation of the Adolescent School Attendance Act introduces important problems that must be solved in the immediate future. The most important of these is the establishment of part-time courses for those who hold home permits or employment certificates under this Act. As has been pointed out from time to time in my reports, part-time courses of instruction have been voluntarily organized in co-operation with industries in several of the day technical schools. But after September, 1922, all school boards in urban municipalities with a population of 5,000, or over, must make provision for the establishment of part-time courses, and all young persons between fourteen and sixteen years of age, who are at work, must attend school at least four hundred hours per year. After September 1923, the same municipalities must extend their courses to give instruction to workers between sixteen and eighteen years of age for three hundred and twenty hours per year.

While the responsibility for establishing these courses rests with the municipalities, the Department of Education must be prepared to give direction and assistance to boards and advisory committees. As a matter of fact, all the steps that have been taken in the direction of establishing vocational classes and schools have had in view a permanent organization which would provide satisfactorily for compulsory part-time courses as well as for full-time instruction in academic and vocational subjects. Classes established and maintained under the Vocational Education Act will be found, as a rule, most suitable for all workers who have reached the fourth book standard of the public school, because all part-time courses of study planned under this act to meet the needs of employed boys and girls must provide instruction in the subjects of a general education as well as a training in the subjects, processes, and operations which are fundamental in the commercial, agricultural, home-making, art, or industrial occupations in which young persons are actually engaged or into which they wish to enter. On the educational side, therefore, the enforcement of the Adolescent School Attendance Act will not only give a great impetus to the establishment of vocational education, but will present important problems in organization and administration that must be solved.

The problem of providing more satisfactory means for the vocational training of teachers is also to be solved. The temporary provisions made through evening classes and summer schools are inadequate. Either a special department should be added to one of our present professional training schools or an independent college for the purpose should be established.

Action has been delayed through the negotiations which have been taking place for the organization of a Dominion College maintained and supported in part by the Dominion Government and in part by the Province in accordance with a co-operative agreement. Such negotiations have been carried on for about two years, but it would now appear that a plan for co-operation on the proposed basis cannot be carried out.

Statistical Reports

The statistical reports will be found on pages 248-263.

APPENDIX C

REPORTS OF THE INSPECTORS OF CONTINUATION SCHOOLS

1. REPORT OF INSPECTOR MILLS

To the Honourable R.H. Grant, M.P.P.,
Minister of Education for Ontario.

Sir,—

I have the honour to submit the following report on the Continuation Schools under my supervision for the academic year 1920-1921.

I have the honour to be, Sir,

Your obedient servant,
G. K. Mills.

Toronto, January 14th, 1922.

During the year 1920-21, I had charge of the Northern and Eastern part of the Province. In this district there were seventy Continuation Schools in operation throughout the school year and the necessary preparations were made for opening new schools at Cobden, Denbigh, Iroquois Falls, Islington, Sprucedale, Sunderland and Hastings. For some reason not reported, the school at Hastings failed to open, but the others are now in operation so that in this division of the Province there are now seventy-five schools that may be classified as follows:—

Grade C Schools—
- (i) having the full time of one teacher 17
- (ii) having the full time of one teacher and at least half the time of a second teacher.....9

Grade B Schools—
- (i) having the full time of two teachers.....46
- (ii) having the full time of two teachers and part time of a third teacher 1

Grade A Schools—
- having the full time of three teachers.....2

75

Increased Attendance

In almost every school visited during the past term the enrolment of pupils showed a marked increase over that of any previous year. In several schools the increase in attendance was so great as to necessitate an additional teacher. Thus the Westboro' staff has been increased from three to four teachers, Marmora,

Lanark and Finch from two to three teachers, Powassan from one to two and several schools are attempting to carry on with an attendance that is entirely too large for the staff.

This increase in attendance is due to several causes of which probably the most important is the present business depression which has resulted in lack of employment in the industries. The increase in the number of boys and in the proportion of boys to girls in the schools is quite apparent. The Adolescent School Attendance Act has also been an important factor but apart from these two causes there is a more general recognition of the need for a better education as a preparation for the work of life and a very general demand for better educational facilities. An improved financial condition has enabled many parents to give their children access to the educational opportunities of the district that was formerly impossible.

New Schools

The increased grants to Continuation Schools and the amendments made to the Continuation Schools Act whereby the county is required to pay the cost of maintenance of all county pupils and a proportionate share of 80 per cent. of the cost of building, and adjoining counties are required to pay 80 per cent. of maintenance and a share of 80 per cent. of building, have placed Continuation Schools within the reach of all. In a number of places several school sections have formed a union for the purpose of maintaining a continuation school, and even single sections in the open country are now establishing Grade C Continuation Schools in which the pupils are receiving two years of the High School course. In all, seventeen new Continuation Schools were established in the Province last year and I am convinced that one hundred more could readily be established in rural districts if School Boards were aware of the generous financial provision made for the maintenance of these schools.

The attendance in a number of the Continuation Schools has grown until the attendance warrants the employment of a third teacher. When such a school is located in one of the larger centres of population which is prosperous and gives assurance that the attendance will increase rather than diminish, there should be no delay in giving such a school the status of a High School. Grants to Continuation Schools are apportioned for only two teachers, and on the new basis for apportioning grants to High Schools, a three-teacher High School will receive larger grants than a three-teacher Continuation School.

For the past year or two there has been a financial benefit in remaining a Continuation School and because of this a number of schools have remained as Continuation Schools that should have been given the status of High Schools. Several schools in the Northern and Eastern division of the Province could, with profit, take this step. Such schools as Huntsville, Westboro', Mimico and Lakefield might well do so at once and others as Lanark, Finch, Marmora and Millbrook might remain as they are for a year or two until it can be seen whether the attendance will remain permanent. In the case of some schools that now have a large attendance, it may be that the establishment of other Continuation Schools in the vicinity would decrease the attendance. If the establishment of other Continuation Schools would give better service to the children of the district, without unwise expenditure of money, it would be better to do this than to attempt to build up a large school at one centre.

Supply of Teachers

For the past four or five years there has been an increasing scarcity of teachers due, as everyone knows, to inadequate recompense and the greater attractiveness of other occupations. Owing to the scarcity and in no small measure to a federation formed among the teachers, salaries have increased until, with care, it is now possible for a man engaged in teaching to live with some degree of comfort and assurance regarding his old age. A maximum seems to have been reached during the past summer and it remains to be seen whether present salaries and working conditions will attract young, energetic and capable teachers, both men and women, in sufficient numbers to carry on the various departments of the work that must be carried on if our youth is to receive the education and training necessary as a fair preparation for the duties of life.

The great majority of the teachers who every year enter other occupations are lost to the teaching profession. Those qualities that make for success in teaching are the qualities needed for success in any other occupation, and notwithstanding the severe business depression of the past year very few teachers are returning to the work. But the higher salaries, the increased public interest in education and the broader field of work that is opening up, adding new interests and giving greater opportunity for service and reward, are attracting a greater number of young men and women into the work. The attendance at the training school is larger this year than last and the number of young men is greater than for many years. The effect of the reorganization of the High School courses and of the examination system will not be felt for another year or two.

Possible Results from Recent Re-organization

While it is too early to determine with any degree of accuracy what results will follow from the recent reorganization of the work of the school and of the system of examinations, one may be permitted to forecast some of the possibilities. Since the work to the end of Normal Entrance or of Junior Matriculation may be covered in three years, but it is impossible to get both in three years, and since the average student would be too young and immature to enter Normal School or to profitably enter upon a course at the University after a High School course of three years, it should be possible in many Continuation Schools with the active support of the School Boards to introduce special two-year courses in one or more of Elementary Agriculture, Household Science and Commercial work, and thus make the service given by the school cover a full four years' course for all pupils.

Owing to the increased attendance many of the schools need the assistance of a third teacher and an ideal condition could be brought about if each of the teachers was prepared to take charge of one of the special courses mentioned. Liberal grants are offered for efficient work in these departments and these grants would go far to defray the cost of the additional teacher.

It is conceivable and very desirable that these Continuation Schools should become centres about which winter schools or evening schools would develop so that the school may be made to serve the needs not only of those pupils who have reached the standard of Entrance to High Schools but of all the youth of the locality. To argue the question as to whether it would be better to extend the services of the schools that already exist or to establish other schools whose special duty it would be to look after the special education and training of adolescents who do not wish to take the usual academic courses of the High School would take me beyond the bounds of this report.

Graded and Ungraded Schools in Relation to Entrance Examination

Early in the past term I noticed what seemed to be a difference in age and size of pupils who enter the Continuation Schools from the ungraded rural schools and from the graded schools of the village or small centres of population. So decided was this difference that I have made inquiries into this matter in most of the schools visited during the term and it is usual to find the average age of pupils from the ungraded school to be much below that of the pupils from the graded schools. This difference in average age varies from one month to two and one half years. Occasionally the average age of the graded school pupils is below that of the pupils from the ungraded school but in such case the difference is small and if it occurred in one school in any inspectorate it was likely to occur in other schools in the same inspectorate.

While my investigation into this matter was not exhaustive, I saw enough to convince me that a condition exists that requires serious attention. If it is true that the country pupils, who walk from one half to two miles to an ungraded school through all kinds of roads and weather, make more rapid progress than pupils who walk a few blocks to a graded school, it will form one of the strongest arguments against consolidation. From my investigation I do not believe the rural child to be any brighter or to have better natural ability than the village pupil. Rural pupils who walk a mile or two to the village school do not make more rapid progress than the village pupil.

Many factors may combine to cause this condition. It might arise from too frequent changes of teacher, but these changes in the ungraded schools are more frequent than in graded schools. Frequently, retardation of pupils is caused by overloading the teachers, particularly the primary teachers; but the evils that arise from overloading the teacher should be greater in the ungraded school with from six to eight classes than in the graded village school with its one, two or three classes. It may be thought that country pupils have fewer distractions and apply themselves more diligently, but I am not at all sure that country pupils who walk to the village school make more rapid progress than the pupils resident in the village. The educational atmosphere of the locality is a matter to be considered but it would be difficult to prove that the influence of this factor was not as great in the village as in the country.

After some consideration of the matter I am convinced that the retardation of graded school pupils arises because of the more rigid system of promotion examinations and the larger classes. It is agreed that the average age of pupils entering High or Continuation Schools should be earlier than at present and nearer thirteen than to fourteen years of age. If this is to be accomplished the system of yearly promotion from room to room must be very effectively modified. A thorough examination of this matter by those responsible will, I am sure, result in benefit to both pupils and teachers.

Temporary Certificates

Owing to the scarcity of teachers during the school year 1920-21, and to the reluctance of School Boards to offer, early in the summer of 1920, the salary necessary to secure qualified teachers when such were available, it became necessary to issue more than the usual number of temporary certificates or to allow some schools to be closed. Some Boards were convinced that there were plenty of teachers but that they were holding back for higher salaries on the advice of

the federation of teachers and claimed to believe that teachers would be plentiful about the time for opening schools. As a result several schools were without teachers when the opening day came and several others had accepted teachers with varying degrees of qualifications on various pretexts.

Any experienced teacher knows that the wisest thing to do at times is to look out of the window, and that plan is occasionally followed by the Inspector. However, just as there are pupils who will persistently take advantage of leniency and attribute it to weakness on the part of the teacher, so, occasionally, there are school boards that will comply fairly with the regulations only when they know it is very dangerous to do otherwise. To issue Temporary certificates except when absolutely necessary is the surest way to depress the standard of the teaching profession and to belittle the teacher's position in the minds of the people of the locality in which such a teacher holds a position. To lower the standard inevitably increases the instability of the profession and this instability is the greatest cause of waste in the efforts made to get efficiency in educational work. The investment in public education yields but a small part of the returns it could be made to yield were the teaching body stable and adequately prepared for its duties and responsibilities. The change made in the regulations relating to attendance at Summer Schools, whereby the Department makes an allowance of one dollar and a quarter per day and railway expenses, will go far to remove the necessity for Temporary certificates.

Means of Equalizing the Cost of Secondary Education

During the past two years much has been done to put secondary education within the reach of all if school boards will avail themselves of the generous financial provision of the Continuation Schools Act. Yet there are inequalities and what might be termed injustices. For example, people who live *near* but not *in* a High or Continuation School district may have their children educated at the expense of the County, while those who live *in* such a school district have to pay the full cost of educating the children of the district, apart from the Legislative grant, and at the same time help to pay for educating the children from the County outside the school district. In other words, where the ratepayers of a school section, a union of sections, or a municipality are sufficiently progressive to establish a secondary school they must levy a heavy tax on themselves that the ratepayer outside such a school district escapes, although he may have the advantage of the school for his children at the small cost levied by the County for the cost of educating County pupils, which would not likely be more than one-quarter mill.

The children of parents living *near* but not *in* the school districts who attend these schools pay no fees and the parents pay only the County levy for cost of education of pupils at secondary schools which is from one-fifth to one-fourth of a mill.

This County levy is also paid by all ratepayers in the High and Continuation School districts. Therefore, the ratepayers living *in* the High and Continuation School districts pay from five to twenty times as much for secondary education as the ratepayer outside but near such a district.

It is reasonable to expect that the ratepayers in the section or municipality in which the school is located should pay more than those at a distance, but be-

cause of the present arrangement it is difficult to induce the ratepayers of sections near established or proposed schools to join with other sections to help to maintain the school. Why should they? They get the advantage without paying anything beyond the County levy.

Under Sections 8 (1) and (2) of the Continuation Schools Act the County Council has authority to contribute such further sum as it may deem expedient toward permanent improvements or to maintenance of Continuation Schools in the County, but few County Councils will pay more than is required by law.

Inequality of Educational Opportunity

On occasions many are fond of proclaiming that it is the aim of the Department of Education to provide all with equal educational advantages as far as this is humanly possible. I am confident that the people of the Province of Ontario are both able and willing to pay for good educational advantages for all if we can direct their thoughts aright. Without interested parents there can be little real progress in educational affairs. It is a problem of salesmanship: we have something to sell and our proposition must be attractive both as to quality and cost.

It must be apparent to all that in localities outside of the cities and large towns little public money is expended for the benefit of that great body of youth who leave school before reaching the standard of Entrance to the High Schools. By far the greater part of the public money that is expended for educational purposes is for the benefit of the relatively few who have some aptitude for absorbing book information, an opportunity to attend a good school and a willingness to bear the restraints of school life. Have the others who drop out at an early age from various causes no claim to a fair share of public money so that they may develop the abilities they possess? In the cities, where is to be found the large mass of the foreign born, the children are having educational advantages not dreamed of in the country. This is possible because of the concentrated wealth of the cities, but the Province has the duty and the responsibility to provide similar educational advantages in rural districts. Many parents leave the farms and cease production just to give their children the better educational advantages of the town. Such parents should not be blamed as they are doing just what they should do until the State has provided them educational advantages which permit their children something like an equal chance with others. Rural children should not be penalized because they elect to remain on the farms.

The average parent believes in the need for a better education for the youth of fourteen, but he feels that the ordinary work of the local school is not what that youth needs. To insist that rural and village pupils shall comply with the provisions of the Adolescent School Attendance Act and continue at school until they reach the age of sixteen, when all that is offered them is a little more grammar, geography, history, etc., taught by a young girl, is futile.

The whole problem of public education of adolescents in rural districts must be taken vigorously in hand and the most earnest thought of the best minds concentrated on it. Higher levels can be reached in either the standard of education and training now given in the schools, or in the extension of the service given by these schools to a greater body of youth, only by conscious adoption of a policy toward that end. This policy must meet the needs of those for whom it is undertaken as without public recognition of the need for improvement there can be little progress.

II. REPORT OF INSPECTOR HOAG

To the Honourable R. H. Grant, M.P.P.,
Minister of Education for Ontario.

Sir,—I beg to submit for your consideration a brief report on the general condition of the Continuation Schools which have been under my supervision for the year 1920-21.

I have the honour to be, Sir,
Your obedient servant,
J. P. Hoag.

Toronto, January 24th, 1922.

Schools and Teachers

During the year 1920-21, I had inspectoral supervision of those Continuation Schools situated in the western peninsula of Ontario, between Georgian Bay and Lake Erie, and along the main line of the Canadian Pacific Railway from Sudbury to Keewatin. The schools in this inspectoral district may be described as follows:

No. of Schools.	Description.	No. of Teachers.
18	Each employing 1 teacher	18
4	Each employing 1 full time and 1 half time teacher	8
59	Each employing two teachers	118
5	Each employing 2 full time teachers and 1 part time teacher	15
A total of 86 schools and		159 teachers.

Inspectoral Visits

Under the regulations of the Department of Education, it is necessary to spend one day of inspection for each teacher on the staff of a school. In many cases, local conditions or changes in staffs may make it necessary to visit a school a second, or even a third time during the year. During the past year it has been found necessary to visit a number of places to discuss with trustees and ratepayers the question of establishing new Continuation Schools. As many of the Continuation Schools are situated on branch lines of railway or at some distance from a railway, it is easily seen that the time of a Continuation School Inspector is pretty fully occupied.

I am pleased to report that I have been able to visit each school during the school year and to make additional visits where this was found necessary.

In my visits of inspection, I have very often been accompanied by the local Public School Inspector. It is my duty and privilege to acknowledge the great assistance I have received from the local Inspectors, whose knowledge of local conditions is necessarily far greater than mine. Indeed I feel sure that the active sympathy of the Public School Inspectors has been one of the main factors making for the success of the Continuation School movement. In almost every case where a new Continuation School is established, it is the local Inspector who takes the initiative in opening the question, and when the Continuation School Inspector visits the locality concerned, it is the local Inspector to whom he turns for advice and assistance.

Increased School Attendance

On September 1st, 1921, Part I of the Adolescent Schools Act came into operation. Under this Act, all pupils must continue to attend school up to the age of 16 years. This has resulted in a very largely increased attendance at all High and Continuation Schools. In some cases the attendance has increased from 50 to 100 per cent. over that of the previous year.

In addition to the effect of the Adolescent Schools Act, the industrial depression has led to the return to school of some pupils who had been previously employed and to the continuance at school of many who would otherwise have dropped out.

School Accommodation

Because of the increasing attendance at all secondary schools on account of the Adolescent Schools Act and the industrial depression, many Boards of Trustees have found it difficult to provide accommodation for all the pupils seeking admission. Indeed in some cases local Boards of Trustees have notified County Councils that after September, 1922, it would be impossible for them to provide for rural pupils who might present themselves for admission. Naturally rural school boards and other rural municipal bodies have found it necessary to carefully consider ways and means for providing opportunities for secondary education for the children of rural districts. As a means of meeting the need they have turned to the establishment of Continuation Schools.

New Schools

In the fall of 1922, 17 new Continuation Schools were established; 11 of these in the district under my inspection, and 6 in that under my colleague. In addition to this a large number of public meetings have been held in villages and rural schools for the purpose of discussing matters connected with secondary school education. Inspector Mills and myself have attended many of these meetings and we have already arranged to attend many other meetings of a similar nature during the winter of 1922. Rural school boards and other municipal bodies are becoming aroused to the need of providing better educational advantages for country children. When the generous grants given by the Legislature toward maintaining Continuation Schools have been explained, I have found rural school authorities anxious to go forward. It is safe to say that a larger number of new Continuation Schools will be established during 1922 than in any previous year. Wherever a consolidated school is established, it is certain that a Continuation School will form its highest part. Indeed one of the great arguments for consolidation of schools in any district is that consolidation will provide opportunities for secondary school work.

In connection with the movement to establish Continuation Schools, I feel it a pleasure to acknowledge the assistance and sympathy shown by Mr. W. I. Chisholm, Assistant Chief Inspector of Public and Separate Schools. Because of his extensive knowledge of rural school conditions in the Province, Mr. Chisholm has been able to point out several localities where Continuation Schools were needed. As a result, I have been able to meet ratepayers and school boards in a number of places to confer regarding school matters. A number of Continuation Schools have been established because of the active sympathy and support of Mr. Chisholm.

New Course of Study

The Committee appointed by the Minister to discuss the High School Course of Study and to make such suggestions as it deemed wise made a report in the spring of 1921. Because of this report and on the advice of the Ontario Educational Association a new Course of Study for High Schools was arranged. This new course went into effect in September, 1921. Circulars had been prepared and sent out by the Department of Education in June and August previously. These circulars fully explained the new course of study, but as many of the teachers of the Continuation Schools are young and inexperienced and as there appeared to be very considerable anxiety among these teachers as to how to put the new course into operation, Inspector Mills and myself prepared a circular letter which we sent out to every school so that it would be in the hands of the Principal on opening day. I am glad to say that the teachers have found the new course workable and a decided improvement over the old in that less home work is required and more time is available for school room study because fewer subjects are now taught in one year. The following is a copy of the circular.

Toronto, September 2nd, 1921.

To the Principal of the Continuation School.

Inspectors Mills and Hoag are sending out herewith suggestions regarding time tables for the school year just beginning. In making the suggestions the Inspectors have in mind the new course of study. Principals will, of course, remember that these suggestions are only "suggestions," and are not necessarily to be followed by the Principals. Local conditions will always affect the arrangement of the time table.

Pupils who have completed the work of Form I, and have been regularly promoted to Form II, will not be required to take an examination in Canadian History or Geography in 1922. There will be no Departmental examination in Reading, Writing or Spelling for the Lower School. Full particulars regarding the new course will be contained in the circular which you will receive very shortly.

The Inspectors wish to emphasize the importance of careful direction and supervision of all seat work done by the pupils. Supervision will aid in the development of good habits of study and of neatness in arrangement of written work.

If the Principal desires to introduce any subjects other than those indicated in the suggestions herewith sent, the matter should be laid before the Inspector before action is taken, so that approval may be given if this is deemed wise.

There will, doubtless, be many matters which teachers may have difficulty with during the opening weeks of the school year. The Inspectors suggest that in any case of difficulty the teacher communicate with the Inspector in charge of the District in which the school is situated. Mr. Mills will be in charge of the Continuation Schools in Western Ontario and along the main line of the C.P.R., from Sudbury to Keewatin. Mr. Hoag will have charge of the schools in Eastern Ontario, on Manitoulin Island, on the north shore of Lake Ontario and from North Bay to Cochrane.

Suggestions for Time Tables for 1921-22

(a) For one-teacher schools divide the day into 12 teaching periods; for one-and-a-half-teacher schools divide the day into 13 periods.

(b) Forms I and II should be taken together in English, Botany and either in Grammar or Art. (If Grammar is chosen, interchange the names Grammar and Art in tables below).

(c) Reading will form part of the work in English.

(d) Spelling and Writing will be considered important in all subjects.

(e) All seat work done by pupils should be carefully supervised so that pupils may form correct habits of study. Careless work should not be permitted.

(f) Physical Culture should be taken at intermission for 15 minutes each day.

Grade C (One-teacher Schools.)

Subject	Form I alone.		Form II alone.		Forms I and II.			Form III.	
	Teach.	Study	Teach.	Study	Teach.	Study I	Study II	Teach.	Study
English	.	.	.	.	6	3	2		
Can. History	3	3	.	.	.	.	.		
Physiography	.	.	5	2	.	.	.		
Algebra	4	4	.	.	.	.	.		
Geometry	.	.	4	2	.	.	.		
Arithmetic	.	.	3	2	.	.	.		
Grammar	.	.	3			.	.		
Art	.	.	.	.	5	3	2		
Geography	3	3	.	.	.	.	.		
Botany	.	.	.	.	4	3	2		
Zoology	.	.	4	2	.	.	.		
Latin	4	4	4	2	.	.	.		
French	4	4	4	2	.	.	.		

Grade C (One-and-a-half-teacher Schools.)

English	.	.	.	.	5	4	4	5	3
Can. History	4	4	.	.	.	.	.	.	.
Physiography	.	.	4	4	.	.	.	.	.
Algebra	4	4	.	.	.	.	.	4	3
Geometry	.	.	4	3	.	.	.	5	3
Arithmetic	.	.	4	2	.	.	.	.	.
Grammar	.	.	3	2	.	.	.	.	.
Art	.	.	.	.	4	4	2	.	.
Geography	4	4	.	.	.	.	.	.	.
Botany	.	.	.	.	4	4	2	.	.
Zoology	.	.	4	2	.	.	.	.	.
Physics	.	.	.	.	.	.	.	4	3
Chemistry	.	.	.	.	.	.	.	4	3
British History	.	.	.	.	.	.	.	2	3
Ancient History	.	.	.	.	.	.	.	3	3
Latin	4	4	4	2	.	.	.	5	4
French	4	4	4	2	.	.	.	5	3

Grade B—(Two-teacher schools.)

(a) 11 teaching periods daily: 9 to 10.30 a.m., 3 periods; 10.45 to 12 midday, 3 periods; 1.15 or 1.30 to 2.45 p.m., 3 periods; 3.00 to 4.00 p.m., 2 periods.

(b) Physical Culture daily at intermission for 15 minutes; sexes taken separately.

(c) Forms I and II may be taken together in English, Botany and either Grammar or Art. (If Grammar is chosen, interchange the names Grammar and Art in the tables below).

(d) Work in study periods should be supervised and no careless work permitted.

(e) Reading will be part of the work in English.

(f) Spelling and Writing will be considered important in all work in all subjects.

(g) After pupils of Form II have made a fair start in their Geometry, a part of the time for Geometry of that Form may be devoted to Algebra in order that the work of the Lower School course, begun in Form I. may be completed.

(h) Pupils not taking Latin or French will have much more time than shown in the tables for study in the class room.

Forms I and II are taken together in some subjects.

Subject	Form I		Form II		Forms I and II together			Form III	
	Teach.	Study	Teach.	Study	Teach.	Study I	Study II	Teach.	Study
English	.	.	.	.	6	3	2	6	1
Canadian History	4	2	.	.	.	.	.	.	.
Physiography	.	.	5	1	.	.	.	.	.
Algebra	4	3	.	.	.	.	.	5	1
Geometry	.	.	5	1	.	.	.	5	1
Arithmetic	.	.	5	1	.	.	.	.	.
Grammar	.	.	4	1	.	.	.	.	.
Art	.	.	.	.	5	3	.	.	.
Geography	4	2	.	.	.	.	.	.	.
Botany	.	.	.	.	4	3	.	.	.
Zoology	.	.	4	1	.	.	.	.	.
Physics	.	.	.	.	.	.	.	5	2
Chemistry	.	.	.	.	.	.	.	5	1
British History	.	.	.	.	.	.	.	3	.
Ancient History	.	.	.	.	.	.	.	4	1
Latin	4	2	4	1	.	.	.	6	2
French	4	2	4	1	.	.	.	5	2
All Forms taken separately in all classes.									
English	6	3	5	2	.	.	.	6	2
Canadian History	4	2	.	.	.	.	.	.	.
Physiography	.	.	4	2	.	.	.	.	.
Algebra	4	3	.	.	.	.	.	4	2
Geometry	.	.	4	2	.	.	.	4	2
Arithmetic	.	.	4	1	.	.	.	.	.
Grammar	.	.	3	.	.	.	.	.	.
Art	4	3	3	3	.	.	.	.	.
Geography	3	2	.	.	.	.	.	.	.
Botany	4	3	3	2	.	.	.	.	.
Zoology	.	.	3	2	.	.	.	.	.
Physics	.	.	.	.	.	.	.	5	2
Chemistry	.	.	.	.	.	.	.	5	1
British History	.	.	.	.	.	.	.	3	1
Ancient History	.	.	.	.	.	.	.	3	1
Latin	4	3	4	2	.	.	.	5	2
French	4	3	4	2	.	.	.	5	2

APPENDIX D

REPORT OF THE INSPECTORS OF HIGH SCHOOLS

The Honourable R. H. Grant, M.P.P.,
Minister of Education for Ontario,

Sir,—

We have the honour to submit the following joint report of the condition of the High Schools and Collegiate Institutes of the Province for the year 1920-21.

J. A. Houston.
I. M. Levan.
G. T. Rogers.

Toronto, Dec. 31, 1921.

During the year all the High Schools and Collegiate Institutes in the Province have been duly inspected, each inspector having visited and reported on the schools allotted to him for supervision.

In a general way it may be said that the condition of the schools throughout the province is satisfactory. It is true that there is need of improvement in the character of some of the older school buildings which were erected at a time when the attendance was smaller and the needs in the matter of accommodations and equipment were less keenly recognized. With the improving conditions in the financial and labour markets, and with the additional financial aid offered to boards by recent legislation, it is hoped that the character of the school buildings will steadily improve. Already in several towns and cities plans for new buildings have been prepared and building operations will be undertaken in the near future. The school buildings of recent construction are generally satisfactory and recognize the need of suitable laboratories for the practical teaching of Science, of gymnasia for the work of Physical Culture, and of Assembly Halls for the meetings of all the pupils.

The character of the teaching is gradually improving. The Regulation of four years ago, requiring a University degree of all candidates for admission to the High School teaching profession, is gradually making its influence felt and is filling the High Schools with a more liberally educated and more widely cultured class of teachers. The attendance, which has been steadily growing, has created a demand for a greater supply of teachers; and as the supply has not kept pace with the increased demand, there has been a decided scarcity, which in some schools has caused serious embarrassment. But as a much larger number of students than heretofore is now in attendance at the Ontario College of Education, preparing to enter the profession of High School teaching, the prospects of relief from this embarrassing situation are cheering.

The year has been a notable one in the history of the High Schools, perhaps the most notable in all their history. Recent changes in legislation and in the Regulations are doing much to place the High Schools in a more favourable position to carry on their work more effectively and to widen the sphere of their influence. Among these changes are the following :

(a) The enforcement of the Adolescent Act in municipalities of 5,000 inhabitants or over.

(b) The abolition of the tuition fees charged to local pupils.

(c) Increased grants to High Schools.

(d) Legislation requiring County Councils to pay a share of the cost of permanent improvements in High Schools.

(e) Changes in the courses of study and in the examination system.

Any one of these changes would mark a great advance in the encouragement of secondary education, but their cumulative effect it will be hard to overestimate. They mean that the benefits of secondary education will be more widely distributed, that the severe strain on pupils and teachers will be greatly diminished without any sacrifice of efficiency, and that the expense of conducting a High School will be considerably lightened for the municipality in which the High School is situated.

The Adolescent Act

The Adolescent Act, passed by the legislature two years ago, was proclaimed effective last September in municipalites of five thousand inhabitants or over. Under the provisions of this Act the age of compulsory education has been raised from fourteen to sixteen years. Heretofore a child on attaining the age of fourteen, or even at an earlier age if he had passed the High School Entrance examination, had the legal right to discontinue attending school. Large numbers availed themselves of this privilege. With their limited education these were poorly equipped to succeed in life in an age in which trained intelligence counts so much for success. Now the further education of such children will be cared for. Some will attend the High Schools, others the Vocational schools, and still others will continue their studies in the Public Schools. Already the effects of this legislation are being felt in the High Schools in an increase of attendance, an increase which is likely to grow to great proportions in the not distant future. It requires no great power of imagination to see that these two additional years devoted to education will materially raise the level of intelligence throughout the Province.

The Abolition of Tuition Fees

The abolition of tuition fees is a logical consequence of the enforcement of the Adolescent Act. To compel parents to keep their children at school for two more years and require them to be at the expense of paying burdensome fees would be manifestly unjust. For fifty years we have boasted that Public School education in Ontario is free. To this we can now add the boast that education in Ontario is free right up to the very gates of the University.

Increased Grants

During the last session of the Legislature the sum of fifty thousand dollars was voted as an addition to the former appropriation for High Schools. Regulations have been drafted for apportioning this additional sum. The help thus afforded will enable many struggling Boards to provide better facilities for carrying on their work and to employ a better grade of teacher.

Payment by County Councils of a Share of the Cost of Permanent Improvements in High Schools

For many years it has been a grievance with High School Boards that the County Councils were not paying a fair share of the expense of educating County pupils at such schools. In the past the County Councils have been required to bear a proportionate share in the cost of maintenance, but maintenance covered but a small part of the whole cost of education. Deputations have repeatedly represented the injustice of this to successive Ministers. Difficulties, however, were supposed to stand in the way of providing a remedy; and until the present year no legislative action has been taken to remedy the acknowledged injustice. But at the last session of the legislature the Minister introduced a Bill providing that County Councils should pay a proportionate share of the debentures issued for permanent improvements. After full discussion the Bill was passed.

The effect of this legislation will be far-reaching. It will undoubtedly result in improving the accommodations in many of the schools. Boards will now not hesitate so long to provide better accommodations when they have the help of the County in meeting their expenses. In many schools the need of better accommodations is caused solely by the presence of County pupils. In some cases, indeed, County pupils have been excluded from the High Schools because Boards have been unwilling to incur the expense of providing the additional room needed to provide for them. With the aid given under the provisions of this Act many Boards will now be able to replace buildings which have become antiquated or have proved too small for the growing attendance.

Changes in the Course of Study and in the Examination System

But a greater change and one that will have a much more far-reaching effect on the efficiency of the High Schools is that which has been made in the course of study and in the system of examinations. This change is so important that it deserves extended notice.

Until midsummer of the present year the schools had been working under a course of study that had been in existence since 1913. This course was a decided improvement on that which it replaced and it had many points of strength.

But time and experience exposed many weaknesses. It had a tendency to draft all pupils into the same courses, those for admission to the Normal Schools and for matriculation into the University. It made little provision for a large class to whom these courses made no special appeal, those who desired to secure a good general education without preparing for professional life. It was found, too, that the system made a severe draft on the physical energies of pupils by compelling them to carry an excessive number of subjects simultaneously. Besides, it was alleged that in the multiplicity of subjects to be studied sufficient time was not available for the mastery of important subjects and as a consequence the work done was of a superficial nature. It was further alleged that the system was characterized by too much rigidity and centralization, and afforded no encouragement to local Boards to offer special courses suited to local needs, so that there resulted a lack of local interest in secondary education and no attempt at local initiative.

The Minister, therefore, deeming that the time had arrived when the High School system was in need of thorough revision, in the midsummer of 1920 appointed a special Committee to deal with the situation. The Committee was

composed of representatives of the Provincial Universities, the Ontario College of Education, the Collegiate Institutes and High Schools, the Continuation Schools, the Public and Separate School Inspectors, and the Department of Education, and was instructed to "review the courses of study and the examination system and to consider any other question that affects the organization and efficiency of the schools."

This Committee met frequently and canvassed thoroughly the whole situation with regard to High School education. The members applied themselves earnestly to the task of devising a system which should provide suitably for modern educational needs without causing overpressure on pupils or teachers, which should give ample time for thoroughness in mastering important subjects, and should afford opportunity to Boards to choose courses suitable to special local needs.

In accordance with these aims the Committee drafted courses of study for the first and second years of the Lower School, for the Middle School, and for the Upper School. They proposed that only a few subjects should be obligatory on all pupils, and these chiefly in the Lower School. They suggested a list of optional subjects admitting of variation according to local requirements, adding a recommendation that a maximum and minimum should be set to the number of subjects to be taken by each pupil in the Lower and Middle Schools. The maximum was set at eight subjects and the minimum at five.

After completing this part of its work and before undertaking to revise the content of the subjects of study, the Committee submitted to the Minister an interim Report with the following recommendations:

1. That the High School course of study be a five years' course, consisting of a Lower School course of two years, followed by a Middle School course of two years, and an Upper School course of one year.

As the former Upper School course was a two years' course, the effect of this recommendation is to shorten the High School course by one year. Many pupils have been deterred by the former two years' Upper School course from continuing their studies beyond the end of the Middle School. It is believed that the shortening of the Upper School course will induce many pupils to remain in school until the end of the fifth year.

2. That Physical Culture be continued as heretofore as a compulsory subject in each year of the course.

This recommendation is a tribute to the excellent work now being done in the High Schools in Physical Culture. This subject has, in recent years, received systematic attention in the schools with results decidedly encouraging. Summer Classes have afforded teachers an opportunity of fitting themselves to teach this work; and there are now few schools in which there is not at least one teacher on the staff who is regularly qualified for teaching it.

3. That a limit be set to the maximum and the minimum number of subjects to be taken by each pupil in each year of the Lower and Middle School courses; and that the minimum be five and the maximum eight.

This recommendation marks an important change. Heretofore, with the large number of studies being carried on simultaneously owing to the exigencies of the examination system, it has been customary to organize the schools into ten or eleven periods a day, and in some cases, even more. Under this recommendation Principals will be able to organize their daily programme on a basis of eight or at most nine teaching periods of forty or forty-five minutes each. Important

subjects will receive a lesson each day, more teaching will be done in the school room, opportunity will be afforded for regular supervised study under the eye of the teacher, and the burden of home-work will be very materially lightened. Teaching will be more thorough and a greater mastery of subjects will be secured.

4. That candidates for entrance to the Model or Normal Schools be allowed to write on one or more subjects at a time in any order as approved by the Principal, and on obtaining fifty per cent. of the marks assigned to any paper they be given credit for having passed in such paper and receive a certificate of such standing.

This is a most revolutionary change. Its effects will be far-reaching in lessening the burden on candidates who are preparing for these examinations. To understand how radical is this change it is only necessary to recall the former examination requirements. Heretofore a candidate for the Normal Entrance examination had to pass a Lower School examination, on which he was required to write on eight papers simultaneously, and on a Middle School examination on which he was required to write on eight papers simultaneously. If he failed on two of these papers, he had to repeat the whole examination. To make matters more difficult, some of the subjects on which he wrote were taught in the year before the examination and had to be reviewed specially before he made his test. Under this new recommendation a candidate may if he pleases write on one paper at a time, and if he passes in it he will receive credit for it and will not be required to write on it again. Under the new system the schools can be so organized that four of these subjects may be written off in each of the two years of the Lower School and four in each of the two years of the Middle School. In the smaller schools or in the larger schools if deemed necessary the eight subjects of the Middle School course may be written off in one year. Thus it will be seen the scheme is flexible and is suited to the special requirements of the smaller as well as of the larger schools.

This recommendation has been accepted by the Universities with respect to the Matriculation examinations. Candidates for Matriculation were formerly required to pass simultaneously on at least nine of the twelve papers before receiving any credit. Now they may write on one or more papers as they please and they will receive credit for each paper on which they pass.

5. That the standard for passing on each paper should be 50 per cent.

Under the former system the standard was 40 per cent. on each paper and 60 per cent. on the total. Whether this change means a raising of the standard remains to be seen.

6. That a Graduation Diploma be granted to every High School pupil who passes an examination on twelve papers on the subjects of the Lower and Middle School courses, of which at least six papers must be on Middle or Upper School work.

The full force of this recommendation may easily be overlooked. Its purpose is to encourage the general student who has no desire to be a teacher or to enter professional life to continue his studies to the end of the Middle or even the Upper School course. The Graduation Diploma will be issued by the Department to every pupil who fulfils the conditions. It will contain a record of all the subjects in which the pupil has passed with pass or honour standing. Under the new scheme by which the pupil will receive credit for the separate subjects on which

he passes a satisfactory examination, the Graduation Diploma will be the only certificate which will show a complete record of all the subjects on which he has passed. It will, it is believed, be generally sought for, and will serve as a stimulus to every pupil to put forth his best effort in his studies. It will also have a commercial value, as it is expected that it will be the standard for proficiency in secondary education, and will be accepted *pro tanto* by all registering bodies.

7. That the following be the subjects of study in the Lower School course:

(a) Obligatory subjects :

English (Literature, Composition).

Canadian History and Civics, and Physiography (each for one year and not concurrently).

Algebra and Geometry (each for one year and not concurrently).

(b) Optional subjects :

Arithmetic, Grammar, Art, Geography, Botany and Zoology (or Agriculture and Horticulture), Latin, French, Greek, German, Spanish or Italian, Manual Training, Household Science, Music, Bookkeeping and Penmanship, Stenography and Typewriting. Additional subjects recommended by the local authorities and approved by the Minister.

Note :—Each of the following subjects is a one-year course, viz., Canadian History and Civics, Physiography, Algebra, Geometry, Arithmetic, Grammar, Art, Geography, Botany, Zoology.

It will be observed that this list not only includes the subjects that usually form part of the early years of the High School course, but it gives freedom to Boards to introduce other subjects that may seem to them desirable. It is not subject to the criticism that was directed against the former course that it was arbitrary and inflexible; for under this scheme Boards are at liberty to experiment in framing courses suitable to their needs.

The intention of the Committee in recommending that certain subjects be a one-year course, was not that these subjects should receive less attention than before, but rather that by concentrating on them by frequent lessons better results should be procured than before. For instance, it is thought that after a year of concentration on Canadian History and Civics the student will have a better knowledge of and a greater interest in the subject than under the former system.

It will be observed that the subjects of Reading, Writing, and Spelling, which formed a part of the previous course, are not mentioned in this scheme. It is not intended,however, that they shall be neglected. They are provided for in another way. Reading is to be taught where it logically belongs, in connection with the teaching of English Literature in all forms of the school. Correct spelling and legible writing are no longer to be the special care of one teacher, but are to be insisted on equally by all members of the staff.

Nor should co-operation end here. The teacher of English should have the assistance of every member of the staff in the matter of teaching English. In every class in the school, be it a class in History or Languages or Mathematics or Science, good English should be insisted on. Team work of this kind will, it is believed, give better results in English than we have yet had. Without team work the scheme, so far as English is concerned, will not yield the results that are expected of it. It should be the duty of every Principal to keep ever before the members of his staff the absolute need of co-operation in the matter of requiring good English in all exercises, oral or written.

8. That the following be the subjects of study in the Middle School :

Obligatory subjects :

English (Literature, Composition).

Optional subjects :

(a) Algebra, Geometry, Physics and Chemistry (or Agriculture), British History, Ancient History.

(b) Latin, Greek, French, German, Spanish or Italian.

(c) Manual Training, Household Science, Art, Music, Bookkeeping and Penmanship, Stenography and Typewriting. Additional subjects recommended by the local authorities and approved by the Minister.

As in the Lower School course, the subjects enumerated are those commonly studied at this stage of the student's career. But where desired the course may be modified to meet local needs.

Agriculture, it will be noticed, may be substituted for Physics and Chemistry. This is an entirely new departure. It is a recognition of the value of the study of Agriculture as a means of mental training as well as of its practical value in Ontario where agriculture is still the basic industry.

To prevent overpressure it is provided that each of the foreign languages in Group (b) shall count as two subjects where the two-year course is being covered in one year.

It is provided also that Upper School subjects may be taken in the second year of the course to make up the maximum of eight subjects.

9. That the following be the subjects of study in the Upper School course :

English (Literature, Composition), Algebra, Geometry, Trigonometry, Modern European History, Physics, Chemistry, Biology (Botany and Zoology), Latin, Greek, French, German, Spanish or Italian. Additional subjects recommended by the local authorities and approved by the Minister.

In the Upper School course the list of subjects includes those generally taken at this stage of the student's career: but, as in the Middle and Lower School courses, it may be modified to suit local needs.

It is also recommended that for the Upper School no subject should be obligatory on all pupils, nor should any minimum or maximum number of subjects be prescribed save by the local authorities.

These proposals of the Committee were submitted to the High School Principals and Teachers for consideration and discussion at their annual meeting at Easter this year. They were carefully considered and approved with scarcely a word of unfavourable criticism.

Encouraged by the general favour with which they were received, the Minister decided to bring them into effect without delay. Regulations were prepared for that purpose and the new course was introduced into the schools in September. There were difficulties, as was to be expected, in reconciling the new course with the old during the first year of its operation, as it was necessary to permit those who had begun their studies under the former system to complete them under that system. But these difficulties were reduced to a minimum by making liberal allowances to those whose interests were affected.

At the time of writing the new system has been in operation for four months. It has been warmly received by teachers and pupils alike. It seems already to be certain that the results hoped for will be realized. Longer lesson periods and

fewer lessons each day mean more teaching, more supervised study, less homework, greater concentration and more thoroughness in mastering the subjects studied.

The radical change in the examination system permits an organization whereby three or four of the examination subjects may be written off at the end of each year of the course without imposing an undue burden on the pupil. For example, in an ordinary three or four master school the programme of the first year might reasonably be Canadian History and Civics, Botany, Geography and Art as examination subjects to be written off at the end of the year, and in addition, to make up the maximum, English, Algebra, and (if desired) Latin and French. In the second year it might be Zoology, Physiography, Grammar, Arithmetic as examination subjects, together with English, Geometry and (if desired) Latin and French. In the Middle School the following subjects might be written off in the first year :—English, British History, Algebra and Chemistry; leaving the remaining examination subjects to be written off in the second year.

There has not yet been time to estimate the effect of the new course on the differentiation of the schools, but it is to be expected that in time schools will become individualized and will provide special courses to meet special needs.

The Committee is now engaged in revising the content of the various subjects of study so as to adapt them to the requirements of a modern system of education. This work will be completed in time to permit of the introduction of the whole system into the schools in September, 1922.

In view of all these changes and improvements, we feel justified in believing that the outlook for Secondary education is brighter than it yet has been.

APPENDIX E

REPORT OF THE INSPECTOR OF MANUAL TRAINING AND HOUSEHOLD SCIENCE

To the Honourable R. H. Grant, M.P.P.,
Minister of Education for Ontario.

Sir,

I have the honour to submit herewith my twenty-first annual report on Manual Training and Household Science as carried on in the schools of the Province.

I have the honour to be, Sir,

Your obedient servant,

ALBERT H. LEAKE.

Toronto, January, 1922.

General Progress

The work has proceeded generally along the lines followed in previous years. New centres have been established in Toronto, Hamilton, Ingersoll, Chatham and Peterborough. New schools are being planned in several towns and cities and in almost every case provision is being made for manual training and household science. The introduction of these subjects into the schools of large towns and cities is not generally difficult, but in places with a population of five thousand or less the matter is not so easy.

As noted in previous reports there are some towns in the Province with a population of more than five thousand each that have not yet provided facilities for giving instruction in either manual training or household science. In towns of this size, if the work is properly organized, it should not be difficult to occupy the whole time of one teacher. He should be given charge of the whole of the manual work from Grade I to the end of the Public School course. In this way, a graded scheme could be carried on throughout all the forms of the school in that particular town.

Towns might well co-operate in this matter and employ a teacher between them. It should not be difficult to form a group of three or four towns within easy reach of each other, each having its own manual training centre and equipment and each paying its share of the special teacher's salary, according to the time spent in each place. Now that radial lines are being rapidly extended throughout the Province, the possibility of such co-operative action is becoming greater. The attention of the local inspectors is directed to this matter. Such co-operative action would not only result in the introduction of manual training and household science, but would also promote a better feeling among the different municipalities and lead to combined action in other fields of civic betterment.. I am pleased to note that a few such groups are considering the possibility of such an arrangement.

Memorial School, Hamilton

Probably the best provision yet made for manual training and household science in the Public Schools, is that to be found in the new Memorial School in Hamilton. This consists of a separate building on the school grounds. The manual training accommodation consists of entrance hall, teachers' office, wash room and lavatory, cloak room, manual training room, store room and locker room. The manual training room is of ample proportions and is well decorated with drawings, specimens, models, etc.

The household science accommodation consists of lavatory and wash room cloak room, main kitchen, laundry, small kitchen, pantry, dining room and bed room. The equipment provided is one of the best we have in the Province and no pains have been spared to provide everything necessary.

The main or outstanding feature of the work here is the fact that the girls do practically all the work in connection with their "flat" or "home." It is their proud boast that the caretaker does nothing inside the door except remove the garbage. The teacher has so organized her work that all the ordinary household activities are taught. The teacher thus describes her methods of handling the work:

"The whole class remains for the theory part of the cooking lesson. Then the housekeeping and laundry for the day is discussed, and the group to undertake this is dismissed from cookery, coming back for the serving. While the cookery class get out utensils and distribute supplies, the teacher visits the other groups, assigning definite duties and demonstrating methods of working. Quality of work, rather than quantity, is demanded of these groups. The laundry group look after the towels of the previous class, from Junior classes, from the manual training room and teachers' rooms, their own uniforms and the teacher's uniform, which introduces starched work.

"The housekeeping group is taught bed-making, table setting, or some simple home nursing problem in rotation until all in the class have been taught. We try to arrange our work so that a longer and shorter lesson are put on together. We find that the girls are so interested and feel the responsibility of their school home to such an extent that discipline maintains itself, which makes the teacher's supervision much easier. The pupils do the entire housekeeping of the flat. They are given full charge of the getting out and putting away of supplies, the oven or steamer, the simpler cleaning, the towel supply, the simpler nursing for cuts, burns, etc., a great deal of the blackboard work, most of the shopping and looking after and reporting on supplies. They even share the keeping of discipline. One girl of each group of four is responsible for her group or 'family' as we prefer to call it." Sewing is also taught by the same teacher.

The methods being adopted by Miss Dowd in this school are worthy of imitation and the success being achieved seems to prove that with proper organization it is possible for one teacher to deal with all the activities of the ordinary household.

Rural Schools

Great progress has been made in the introduction of manual training and household science into the Rural Schools. In the year 1919-20 these subjects were taught in 190 schools, in 1920-21, 308 schools, and owing to the teachers being trained in summer schools and Saturday classes at two of the Normal Schools, the prospects are that for the current school year these numbers will be very largely increased.

The best method of approach to household science in the Rural School is through the medium of the hot noon-day lunch or the preparation of one or two hot dishes to supplement the lunch brought from home. Owing to the fact that many pupils live far from the school, it is impossible for them to go home for the mid-day meal, and they are thus dependent upon lunches which they bring with them. Very frequently the pupils are allowed to eat their lunches where and how they please, and the method chosen is conducive neither to comfort nor to health. In fine weather they do not wish to lose any time from their games, and so they eat their food while playing, or they bolt it in order that they may get to their play more quickly. In severe weather they crowd around the steps or the stove and do not hesitate to scatter crumbs and crusts. In one case even a teacher has been seen holding a sandwich in one hand and writing on the blackboard with the other.

In many cases the lunch does not attract the pupil. It is often carried without proper wrapping, in a tin pail, and it then absorbs the taste of the tin; again it is often wrapped in newspaper and is flavoured with the printers' ink; occasionally, it is wrapped in cloth not too clean. Conditions such as these are not fair to the pupils. They come a long way to school, often over poor roads; and it is necessary, for both their physical and their mental development, that they should receive adequate nourishment served as attractively as possible. Many of the defects found among school children can be traced, to a greater or less extent, to lack of nutrition. The United States military draft shows that the number of those physically defective is from seven to twenty per cent. higher in rural districts than in towns and cities, and this difference is not peculiar to that country. May we not reasonably suppose that many of these defects are caused by mal-nutrition, and that this mal-nutrition is in part due to the poor noon-day lunch? As these defects hinder mental as well as physical development, the question of proper nutrition through the medium of the school lunch becomes an educational one.

Interest in this subject is rapidly growing in the Province and scarcely a mail is received that does not contain many requests for advice, information and requests to address public meetings in rural districts on this subject. The Women's Institutes have played a great part in arousing the people to a more adequate conception of the importance of this subject and in many instances have materially assisted in obtaining the necessary equipment. In order to stimulate popular interest in this subject the Department has had prepared a moving picture film which shows the practical working out of the scheme. This picture was not "faked" but was taken in our own rural schools mainly in Wentworth County. It is available in Pathescope and Standard sizes and will be used for lecture purposes and may be loaned to any approved organization able to make use of it for educational purposes. The unanimous experience of those teachers who established the hot dish is that the health of the children, the character of their work in the afternoon and their attendance is materially improved. One great advantage is that the pupils are under proper supervision during the noon hour and moral and physical injury is prevented.

Owing to the rapid increase in the number of rural schools introducing manual training and household science, the Legislative appropriation was found insufficient to pay the grants in full and unfortunately a reduction had to be

made. It is confidently hoped, however, that in view of the far-reaching effect of the work that the next appropriation will render such a course unnecessary.

Summer Schools

During the year three summer schools in manual training were held and one in household science. One of these courses was given at the Technical School for the purpose of offering an opportunity to teachers holding the Elementary certificate to obtain the ordinary certificate. At the same time a change in the Regulations was made by which after the year 1925 the Elementary certificate will be valid in Rural Schools only. The second course was given at the College of Education for the purpose of qualifying for the Elementary certificate, a completion of which requires two summers. The third course was one given in Farm Mechanics at the Ontario Agricultural College and qualifies for teaching that subject in the Agricultural Departments of the High Schools.

The household science course was given at the Technical School, Toronto, and was attended by approximately one hundred teachers all from Rural Schools. The work taken here dealt entirely with the possibilities of the Rural School, with reference to household science and the serving of at least one hot dish at the noon-day lunch. These students did remarkably good work during the course and many of them left with the expressed intention of taking up the work in their schools in September.

Saturday Classes

The summer schools above referred to are held for five weeks during July and August when the schools are closed. An experiment is now being tried out at two of the Normal Schools, Hamilton and London, in holding classes on Saturdays. For several years past voluntary classes have been held in Hamilton on Saturdays. Rural teachers in service in Wentworth County have been visiting the Normal School on Saturday for the solution of the difficulties they have met with during their school practice. Out of this movement inspired by Inspector Robinson and ably supported by the authorities of the Normal School, the present classes have grown. The numbers in attendance require the services of two household science teachers and one manual training teacher.

Miss Elliott of the Hamilton Normal School explained the scheme to the teachers of East Middlesex assembled in their annual Institute and a number of the teachers asked for similar classes. At the request of Inspector Thompson these classes were established at London Normal School.

The following circular explains the purpose of these classes and outlines the Regulations under which the classes are carried on:

Saturday Classes— In Manual Training and Household Science at Hamilton Normal School—1921-22

1. In order to assist teachers at present in service in rural schools the Minister has decided to open Saturday Classes in Manual Training and Household Science.

2. The classes will commence on Saturday, October 1st, 1921, and will continue until Saturday, June 10th, 1922.

3. Any teacher actually employed in a rural inspectorate is eligible to attend.

4. The Course provided will parallel the Summer Course given in Toronto and will be given the same credit for the Elementary certificate.

5. An examination will be held at the end of the Course, and successful students will be required to attend the second year of the Summer Course held in Toronto, 1922, in order to complete the elementary certificate in Manual Trainng or Household Science, unless excused by the Minister.

6. Regular attendance will be expected and absence must be satisfactorily accounted for to the Principal of Hamilton Normal School.

7. An allowance of $1.25 will be paid to each student for each day's attendance to assist in paying travelling and other expenses.

8. The organization meeting will be held at 10 a.m. on Saturday, Oct. 1st, and the students will then decide the time of the classes so as to secure five hours instruction each day.

9. Applications endorsed by the Public School Inspector concerned should be sent to Mr. F. F. MacPherson, Principal of Hamilton Normal School.

Training of Teachers

The measures where outlined, if continued, will take care of the requirements of the Rural Schools in regard to teachers of household science and manual training, but we require teachers who specialize in these subjects and spend their whole time at the work. In the case of household science this is now provided for at the College of Education where we have a small but efficient Department which gives one full year of training in household science to students who already hold a Second Class Professional certificate. If and when new buildings are erected at the College of Education, more extensive provision should be made for the accommodation of candidates for the certificate qualifying teachers for household science instruction in the Urban Schools.

In the case of manual training we have at present no provision for training teachers and now that all returned soldiers who were trained two years ago have been absorbed by the schools the question is urgent. Training classes were formerly held at the Ontario Agricultural College but owing to the extension of College activities, provision could no longer be made there and we are now without any facilities for training the necessary teachers. The logical place for training such teachers seems to be the College of Education but until additional accommodation is provided the matter can hardly be considered in this connection.

In case it is found impossible to establish efficient training classes for this purpose some such scheme as that adopted by the City and Guilds Institute of London might be adopted.

The whole question of providing an adequate supply of teachers for this subject should receive early attention.

Manual Training and Household Science Centres

No useful purpose would be served by giving the names of the 308 Rural Schools that are now teaching manual training or household science or both, but any School Board that is considering the introduction of these subjects will be gladly furnished with the names of the nearest schools where the subject may be seen in operation.

The following is a list of the fully equipped manual training and household science centres:—

Manual Training		Household Science	
		Belleville	High School.
Beamsville	High School.	Beamsville	High School.
Brantford	Collegiate Institute.	Brantford	Collegiate Institute.
	Central Public School.		Central Public School.
	Major Ballachy Sch.		Major Ballachy Sch.
Brockville	Public School.	Brockville	Public School.

Manual Training		Household Science	
Chatham	Collegiate Institute.	Chatham	Collegiate Institute.
	Public School.		Central School.
			McKeogh School.
		Cobourg	Collegiate Institute
Collingwood	Public School.	Collingwood	Public School.
Cornwall	Public School.	Cornwall	High School.
Fairbank	Public School.	Fairbank	Public School.
Fort William	Collegiate Institute.	Fort William	Collegiate Institute.
	Public Schools.		Public Schools.
Galt	Collegiate Institute.	Galt	Collegiate Institute.
Guelph	Consolidated School.	Guelph	Consolidated School—
			(tem. closed).
	Public School.		Public School..
Hamilton	Collegiate Institute,	Hamilton	Collegiate Institute.
	Normal School.		Normal School.
			Adelaide Hoodless.
	Caroline St. School.		Caroline St. School.
	Earl Kitchener School.		King George School.
	King George School.		King Edward School.
	Memorial School.		Memorial School.
	Picton Street School.		Picton Street School.
			Strathcona School.
	Wentworth St. School.		Wentworth St. School.
Ingersoll	Collegiate Institute.	Ingersoll	Collegiate Institute.
Kingston	Public Schools.	Kingston	Public Schools.
	Collegiate Institute.		
Kitchener	Public Schools.	Kitchener	Collegiate Institute.
			Public Schools.
Listowel	Public School.		
London	Collegiate Institute.	London	Collegiate Institute.
	Aberdeen School.		Aberdeen School.
	Alexandra School.		Alexandra School.
	Boyle School.		Boyle School.
	Chesley School.		Chesley School.
	Lord Roberts.		Lord Roberts.
	Riverview School.		Riverview School..
	Ryerson School.		Ryerson School.
	Tecumseh School.		Tecumseh School.
			Talbot Street School.
			Sacred Heart School.
	Normal School.		Normal School.
Madoc	Public School.	Madoc	Public School.
Niagara Falls	Collegiate Institute.	Niagara Falls	Collegiate Institute.
		Niagara Falls S	High School.
North Bay	Normal School.	North Bay	Normal School.
Oakville	High School.		
Orangeville	Public School.		
Ottawa	Normal School.	Ottawa	Normal School.
	Cambridge St. School.		Cambridge St. School.
	Connaught School.		Connaught School.
	Creighton St. School.		
	Elgin Street School		
	First Avenue School.		First Ave. School.
	Glashan School.		
	Hopewell Ave. School.		Hopewell Ave. School.
	Mutchmor St. School.		
	Osgoode St. School.		Osgoode St. School.
	Percy St. School.		
	Slater St. (Kent Sch.).		Slater St. (Kent Sch.).
	Wellington St. School.		
Owen Sound	Collegiate Institute.	Owen Sound	Collegiate Institute.
	Dufferin Public School.		Dufferin Public Schl.
		Paris	Public School.
Peterboro	Normal School.	Peterboro	Normal School.
	Central School.		Central School.
	Prince of Wales.		Prince of Wales.
Port Arthur	Collegiate Institute.	Port Arthur	Collegiate Institute.

Manual Training		Household Science	
Port Perry	High School.	Port Perry	High School.
St. Catharines	Public Schools.	St. Thomas	Collegiate Institute.
St. Thomas	Collegiate Institute.		Balaclava St. School.
Sarnia	Public Schools.	Sarnia	Public Schools
Sault Ste. Marie	Collegiate Institute.	Sault Ste. Marie	Collegiate Institute.
	Central Public School.		Central Public School.
	West End Public Sch.		West End Public Sch.
Smith's Falls	Collegiate Institute.	Smith's Falls	Collegiate Institute.
Stratford	Collegiate Institute.	Stratford	Collegiate Institute.
	Romeo School.		Romeo School.
	Normal School.		Normal School.
Sudbury	Collegiate Institute.	Sudbury	Collegiate Institute.
Toronto	Annette St. School.	Toronto	Annette St. School.
	Bedford Park.		Bedford Park.
	Brown School.		Brown Scrool.
	Dewson St. School.		Dewson St. School.
			Dovercourt School.
			Duke of Connaught.
	Earl Grey School.		Earl Grey School.
	Eglinton School.		Eglinton School.
	Essex St. School.		Essex St. School.
			Huron St. School.
	Jesse Ketchum School.		Jesse Ketchum School.
	John Ross Robertson.		John Ross Robertson.
	Kent School.		Kent School.
	Kimberly School.		Kimberly School.
	King Edward School.		King Edward School.
			Lee School.
	Manning Ave. School.		Manning Ave. School.
			Orde St. School.
	Park School.		Park School.
	Parkdale School.		Parkdale School.
	Perth Avenue School.		Perth Ave. School.
	Queen Alexandra Schl.		Queen Alexandra Sch.
	Rawlinson School.		Rawlinson School.
			Regal Road School.
	Ryerson School.		Ryerson School.
	Victoria St. School.		
	Wellesley School.		Wellesley School.
			Western Ave School.
	Williamson Rd. Schl.		Williamson Rd. Schl.
	Winchester St. School		Winchester St. School.
	Oakwood Col. Inst.		Oakwood Col. Inst.
	Riverdale Col. Inst.		Riverdale Coll. Inst.
			St. Paul's Sep. Schl.
			St. Francis Sep. Schl.
		Sewing Centres.	
			Brock Ave. School.
			Brown School.
			Clinton St. School.
			Dovercourt School.
			Duke of Connaught. School.
			Eglinton School.
			Essex St. School.
			Frankland School.
			Huron St. School.
			Jesse Ketchum School.
			Lee School.
			Palmerston Ave. Schl.
			Park School.
			Perth Ave. School.
			Queen Alexandra Sch.
			Regal Road School.
			Ryerson School.
			Victoria St. School.

	Manual Training	Household Science
Toronto—(*Con.*)		
		Wellesley School.
		Western Ave. School.
		Williamson Rd. Schl.
		Winchester St. School.
		Withrow Ave. School.
Tweed	Public Schools.	Tweed.....Public Schools.
Walkerville	Public Schools.	Walkerville.....Public Schools.
Whitby	Collegiate Institute.	
Windsor	Collegiate Institute.	Windsor.....Collegiate Institute..
	Assumption St. Schl.	Assumption St. Schl.
	Douglas Ave. School.	Douglas Ave. School.
	Wyandotte St. School.	Wyandotte St. School.
Woodstock	Collegiate Institute.	Woodstock.....Collegiate Institute.

APPENDIX F

REPORT OF THE INSPECTOR OF ELEMENTARY AGRICULTURAL CLASSES

To The Honourable R. H. Grant, M. P. P.,
Minister of Education for Ontario.

Sir,—

I beg to submit for your consideration a report on the Agricultural Classes in connection with the schools of the Province for the year 1921.

I have the honour to be, Sir,
Your obedient servant,

J. B. Dandeno,

Inspector of Elementary Agricultural Classes.

Toronto, January, 1922.

The introduction of classes in Agriculture into the rural schools has already produced tangible results in a direction not at first expected. Through the use of the school garden as a part of the work of the school the interest of both pupils and parents has been awakened towards the improvement of school grounds and building, and this aspect of education is having a particularly far-reaching effect, and is no less important than the scholastic type.

The aim should be to have a well appointed garden as part of the accommodation of every school and to have systematic instruction carried on not only in connection with this garden but also in connection with the work of the homes through the home projects.

Such a scheme of education should make for a more permanent and a happier rural population.

Number of Ungraded Schools with Classes in Agriculture, Sept., 1920—June, 1921

Inspectorate	Inspector	No. of Schools	No. of Home Gardens	No. of School Gardens
Algoma	L. A. Green	4	3	1
Brant and Norfolk	T. W. Standing	10	6	4
Bruce	W. F. Bald	30	18	12
Bruce	John McCool	25	12	13
Carleton and Lanark	R. C. Rose	16	11	5
Carleton	Thos. P. Maxwell	16	4	12
Durham	E. E. Snider	47	38	9
Durham and Northumberland	J. W. Odell	7	5	2
Dufferin	W. R. Liddy	21	7	14
Dundas	H. B. Fetterly	58	42	16
Elgin	J. C. Smith	63	37	26
Elgin	J. A. Taylor	25	19	6
Essex	D. A. Maxwell	20	10	10
Essex	V. C. Quarry	2	2	..
Frontenac	S. A. Truscott	2	2	..
Grey	Samuel Huff	3	1	2

Number of Ungraded Schools with Classes in Agriculture, Sept., 1920—June, 1921 (Continued)

Inspectorate	Inspector	No. of Schools	No. of Home Gardens	No. of School Gardens
Grey	H. H. Burgess	8	2	6
Grey	Robert Wright	11	3	8
Glengarry	J. W. Crewson	37	35	2
Haldimand	J. L. Mitchener	15	11	4
Halton and Wentworth	J M. Denyes	20	14	6
Hastings	H. J. Clarke	33	27	6
Hastings	J. E. Minns	29	24	5
Huron	J. M. Field	20	13	7
Huron	J. E. Tom	66	55	11
Kent	W. H. G. Colles	64	22	42
Kent	J. H. Smith	57	30	27
Lambton	Henry Conn	50	35	15
Lambton	N. McDougall	39	35	4
Lennox and Addington	E. J. Corkill	1	1	..
Leeds and Grenville	J. F. McGuire	26	19	7
Leeds and Grenville	W. C. Dowsley	23	17	6
Leeds and Grenville	T. A. Craig	21	18	3
Lincoln	G. A. Carefoot	8	4	4
Middlesex	H. D. Johnson	49	35	14
Middlesex	P. J. Thompson	70	28	42
Manitoulin	J. W. Hagan	7	3	4
Muskoka	H. R. Scovell	1	1	..
Muskoka	R. O. White	1	..	1
Nipissing	P. W. Brown	1	..	1
Northumberland	R. Boyes	5	4	1
Norfolk	H. F. Cook	20	15	5
Ontario	T. R. Ferguson	8	1	7
Ontario	R. A. Hutchison	10	6	4
Oxford	R. A. Paterson	5	4	1
Oxford	J. M. Cole	44	38	6
Parry Sound	J. L. Moore	1	..	1
Peel	W. J. Galbraith	17	13	4
Perth	William Irwin	51	37	14
Perth	James H. Smith	36	24	12
Peterboro	Richard Lees	9	2	7
Peterboro and Victoria	G. E. Broderick	3	2	1
Prince Edward	F. P. Smith	20	13	7
Prescott and Russell	John Nelson	3	1	2
Renfrew	G. G. McNab	14	8	6
Renfrew	I. D. Breuls	3	2	1
Rainy River and Timiskaming	Chas McDowell	1	1	..
Simcoe	J. L. Garvin	6	3	3
Simcoe	E. J. Longman	7	6	1
Simcoe	Isaac Day	21	19	2
Stormont	James Froats	47	45	2
Timiskaming and Algoma	W. A. Wilson	1	1	..
Victoria	W. H. Stevens	1	..	1
Waterloo	L. Norman	11	10	1
Waterloo	F. W Sheppard	6	4	2
Welland	James McNiece	9	5	4
Welland	J. W. Marshall	5	4	1
Wellington	J. J. Craig	34	16	18
Wellington	Robert Galbraith	1	..	1
Wentworth	J. B. Robinson	33	19	14
York	C. W. Mulloy	12	8	4
York	A. L. Campbell	10	4	6
York	A. A. Jordan	23	20	3
	Totals	1483	984	499

Number of Graded Schools with Classes in Agriculture, September, 1920—June, 1921

Inspectorate	Inspector	No. of Schools	No. of Home Gardens	No. of School Gardens
Algoma	L. A. Green	6	4	2
Brant	E. I. C. Kilmer	9	7	2
Brant	T. W. Standing	1	..	1
Bruce	W. F. Bald	2	2	..
Carleton	Thos. P. Maxwell	1	..	1
Carleton	R. C. Rose	1	1	..
Dundas	H. B. Fetterly	7	2	5
Elgin	J. C. Smith	4	1	3
Elgin	J. A. Taylor	8	2	6
Essex	D. A. Maxwell	1	1	..
Frontenac	S. A. Truscott	1	1	..
Glengarry	J. W. Crewson	4	2	2
Grey	H. H. Burgess	2	..	2
Grey	Robert Wright	1	1	..
Haldimand	J. L. Mitchener	1	1	..
Halton	J. M. Denyes	3	2	1
Hastings	H. J. Clarke	2	1	1
Hastings	J. E. Minns	3	2	1
Huron	J. M. Field	2	1	1
Huron	J. Elgin Tom	4	1	3
Kenora	W. J. Hamilton	2	2	..
Kent	W. H. G. Colles	2	1	1
Kent	J. H. Smith	5	4	1
Lambton	Henry Conn	1	..	1
Leeds and Grenville	W. C. Dowsley	3	2	1
Lennox and Addington	M. R. Reid	1	1	..
Lincoln	G. A. Carefoot	7	1	6
London City	C. B. Edwards and V. K. Greer	7	6	1
Manitoulin	I. W. Hagan	1	1	..
Middlesex	P. J. Thompson	2	..	2
Middlesex	H. D. Johnson	2	1	1
Nipissing District	P. W. Brown	2	..	2
Norfolk	H. F. Cook	2	1	1
Ontario	R. A. Hutchison	2	..	2
Ottawa City	J. H. Putman and E. T. Slemon	14	1	13
Oxford	R. A. Paterson	1	1	..
Oxford	J. M. Cole	4	1	3
Parry Sound	J. L. Moore	1	..	1
Parry Sound	R. O. White	1	..	1
Peel	W. J. Galbraith	1	1	..
Perth	William Irwin	4	1	3
Perth	J. H. Smith	7	1	6
Peterboro City	A. Mowat	2	..	2
Prescott and Russell	John Nelson	1	1	..
Prince Edward	F. P. Smith	4	2	2
Rainy River District	C. McDowell	1	..	1
Renfrew	I. D. Breuls	2	..	2
Renfrew	G. G. McNab	2	..	2
Simcoe	Edwin Longman	1	..	1
Simcoe	J. L. Garvin	2	1	1
Stormont	James Froats	1	1	..
Timiskaming District	D. T. Walkem	1	..	1
Timiskaming	W. A. Wilson	3	1	2
Thunder Bay	John Ritchie	2	..	2
Waterloo	F. W. Sheppard	1	1	..
Waterloo	L. Norman	4	1	3
Welland	J. W. Marshall	5	2	3
Welland	James McNiece	1	1	..
Wellington	J. J. Craig	3	..	3
Wellington	Wm. Tytler	1	..	1

Number of Graded Schools with Classes in Agriculture, September, 1920—June, 1921 (Continued)

Inspectorate	Inspector	No. of Schools	No. of Home Gardens	No. of School Gardens
Wentworth	J. B. Robinson	7	2	5
York	C. W. Mulloy	3	2	1
York	A. A. Jordan	14	5	9
York	A. L. Campbell	2	..	2
Toronto	Walter Bryce	2	1	1
Toronto	A. E. Marty	2	..	2
Toronto	Normal Model School	2	..	2
	Total	204	79	125

Number of Ungraded Separate Schools with Classes in Agriculture, September, 1920—June, 1921

Inspectorate	Inspector	No. of Schools	No. of Home Gardens	No. of School Gardens
Bruce, Grey, Huron, Middlesex, Perth, Waterloo, Wellington	W. J. Lee	31	14	17
Manitoulin, Sudbury	J. M. Bennett	2	..	2
Frontenac, Hastings, Lanark, Northumberland, Peterboro, Simcoe, Victoria	J. P. Finn	17	11	6
Carleton, Glengarry, Stormont	J. E. Jones	9	8	1
Peel, York	J. F. Power	2	1	1
Essex, Kent	J. F. Sullivan	5	..	5
Renfrew	V. C. Quarry	1	1	..
Sudbury	J. G. Gratton	1	1	..
	Totals	68	36	32

Number of Graded Separate Schools with Classes in Agriculture, September, 1920—June, 1921

Inspectorate	Inspector	No. of Schools	No. of Home Gardens	No. of School Gardens
Brant, Bruce, Grey, Perth, Simcoe, Waterloo, Wellington	W. J. Lee	18	4	14
Elgin, Essex, Kent, Lambton, Middlesex, Oxford, Welland, Wentworth	J. F. Sullivan	13	5	8
Carleton	J. F. Jones	2	2	..
Essex	A. Beneteau	1	1	..
Windsor City	John Waugh	1	..	1
Peterboro, Simcoe	J. P. Finn	3	..	3
Renfrew, Thunder Bay	J. M. Bennett	3	..	3
Lincoln, Toronto City	J. F. Power	7	3	4
Renfrew	V. C. Quarry	1	..	1
	Totals	49	15	34

The number of Public and Separate Schools qualifying for grants each year commencing in 1903 is given in the following table:—

Year	No. of Schools	Year	No. of Schools	With School Gardens	With Home Gardens
1903	4	1912	101	.....	.....
1904	7	1913	159	.....	.....
1905	6	1914	264	208	56
1906	8	1915	407	222	185
1907	2	1916	585	324	261
1908	14	1917	989	466	523
1909	16	1918	1,020	588	432
1910	17	1919	1,408	618	790
1911	33	1920	1,648	702	946
		1921	1,804	690	1,114

Until 1914, no distinctions were made in the reports respecting Home Gardens and School Gardens.

Amounts paid out to Boards, Teachers and Inspectors in the form of agricultural grants covering the school years ending June 30th, 1920, and June 30th, 1921:

	1920	1921
Public School Inspectors	$10,655 00	$10,753 00
Separate " "	704 00	845 00
Public Schools, graded, Boards	4,600 24	4,680 15
" " Teachers	13,317 51	15,319 08
" " ungraded, Boards	8,900 53	8,750 01
" " Teachers	31,727 14	33,984 59
Separate Schools, graded, Boards	1,358 89	1,518 86
" " Teachers	3,316 88	3,918 37
" " ungraded, Boards	496 65	555 78
" " Teachers	1,394 25	1,682 34
Grand Totals	$76,471 09	$82,007 18
Grand Total to Boards	$15,356 31	$15,504 80
" " Teachers	49,755 78	54,904 38
" " Inspectors	11,359 00	11,598 00
	$76,471 09	$82,007 18

Amount expended for Instruction in Summer Courses:

Agriculture:

O.A.C.		Whitby	
1917	$2,740 00	1919	$1,189 50
1918	4,874 25	1920	1,910 75
1919	6,665 63	1921	2,531 95
1920	6,636 75	Monteith	
1921	7,803 50	1920	$1,353 05
		1921	2,111 55

Farm Mechanics:

O.A.C.		1919	475 00
1917	$402 00	1920	475 00
1918	402 00	1921	500 21

The following taken from a report by Inspector Campbell of West York shows the chief points of interest in the struggle for better results in the teaching of elementary agriculture in rural and suburban schools. The report here given speaks for itself.

Weston, Aug. 9th, 1921

Instead of filling out the regular forms of Inspector's visits and inspection of the work in Agriculture for each school, I am submitting a somewhat general report. On account of the heaviness of my work I had not time to make my usual June visit to inspect the school gardens and give special attention to the work in Agriculture. What I give in this report is gathered from notes made at my regular visit and from brief statements made to me by the teachers at the close of the term.

Etobicoke Township.

Nos. 7, 10 and 12 have done the best work. The best school garden is that of No. 10, Thistletown. No. 12, Long Branch, has no school garden but gives good attention to school grounds and holds a very successful and instructive fall fair well supported by the ratepayers. The schools at Lambton Mills, No. 3, and Sunnylea, No. 14, are not doing the work as well since there is no grant for a teacher without an Agricultural certificate in a graded school.

In this township, the teachers who have been at Guelph, Miss Eva Nattress and Miss Helen Williams, are doing good work. They know how and have the spirit for it. Five out of fourteen schools in Etobicoke I consider are doing work worth while.

Vaughan Township.

In this township there are 16 one-roomed schools and two of two-rooms. Nos. 2, 5, 12 and 17 have school gardens and the work is good. The teachers in charge have certificates in Agriculture. Other schools in Vaughan doing satisfactory work are, Nos. 3, 8, 9, 18 and 19, although some have not qualified for the grant. There are nine therefore out of the eighteen schools in line.

York Township.

Swansea is the outstanding school in this part of the Township. The work continues very good with liberal supplies and equipment. No. 19 York, Emery, has not done as well this year, school garden poor. No. 31, York, gives fair instruction.

Town of New Toronto.

Under Miss Jean Austin the work here is most satisfactory.

SUMMARY

Total number of rural schools	40
Number teaching agriculture	17
Number qualifying for grant	10
Schools where work has lapsed or fallen down badly	2
Total number of urban schools	4
Number teaching agriculture	1

The cause of lapse or falling down in the work is the incoming of a teacher who has not the certificate or one who does not care for the work and reports to me that the Trustees did not think it worth while to continue.

Amount spent by Trustees for Agriculture, outside of schools like Swansea or New Toronto, rather small, five to ten dollars each.

During this fall I expect to have a little more time to give to Agriculture at my visits and by correspondence with the teachers. I promise you from 60 to 75 per cent. of my schools in line.

Yours faithfully,
A. L. CAMPBELL.

Read the following statements from trustees.

S. S. No. 19, Charlottenburgh, Glengarry Co., Lena D. Murray.

This year, in Agriculltture, was quite a successful one. The work in-doors was covered quite fully. The results from the flower bed show that the work was done carefully. It not only taught the pupils how to do the work, but they were so interested they had beds of their own at home.

H. MACDERMID, *Trustee,*
Martintown.

S. S. No. 12, Charlottenburgh, Glengarry Co., Jennie F. Robertson.

We think the pupils take a great interest in their school garden and take more interest in agriculture generally as a result of their school work. The greatest drawback is the condition of the garden during vacation. If some means could be provided for caring for the garden during this time it would be much more satisfactory. Also quite a lot of trouble is caused by vandalism from outsiders stealing and destroying garden stuff.

S. W. CHRISTIE,
M. D. MCMARTIN,
Trustees,
Martintown.

S. S. No. 16, Manvers, Durham Co., Miriam L. Richardson.

The teacher has put money to good use in beautifying the school grounds.

F. BARNSTAPLE, *Sec. Treas.,*
Janetville.

S. S. No. 19, Darlington, Durham Co., Alice G. Werry.

The garden, which is part of school grounds, is being cultivated in good manner by the pupils. The plots are doing well and the experiments with different fertilizers will be of value. I am of the opinion that if a prize was offered for care of plots during vacation for the best plot, freest of weeds, etc., the morning of September 1st, say at 9 a.m., the pupils would tend to garden during holidays. At any rate the pupils appear to be interested in their garden work this year, and credit must be given to teacher for the work she has taken to make it interesting.

J. J. SMITH, *Sec. Treas.*
Enniskillen.

S. S. No. 21, Clarke, Durham Co., Hazel I. Clark.

We have an excellent garden, well cared for, and we shall continue the good work.

JOHN STEWART, *Sec. Treas.*
Kendal.

S. S. No. 9, Ashfield, Huron Co., Marguerite Sturgeon.

This was our first year taking up Agriculture in our school and we have made considerable progress with it. Our teacher is very anxious to give the subject ample justice and as we are keeping the same teacher on for the coming year, we hope to make still better progress next year.

J. F. JOHNSTON, *Sec. Treas.*,
Sturgeon, Ont.

S. S. No. 4, Goderich, Huron Co., Anna Elliott.

This school has entered the school fair work for this year. The pupils intend having an auction sale of vegetables from the school garden this fall. The money will be used for Agricultural purposes. The school has had a garden these last five years. Agriculture has been taught as a subject in school for two years.

ISAAC JONES, *Sec. Treas.*
Clinton, R.R. No. 2.

S. S. No. 14, Hay Huron, Co., M. M. Jarrott.

The Inspector's recommendation that the teacher take a course at Guelph this summer was considered at our meeting and decided thus: Most of the children of our school have enough and some more than enough work in garden and field at home to get the practical part which the school garden might furnish, therefore, we would not advise the gardening and the teacher to take a course at Guelph.

W. C. PEARCE, *Sec.*
Hensall, Ont.

S. S. No. 4, South Stanley, Huron Co., Marguerite Douglas.

The scholars take a keen interest in the study of Agriculture and in such experiments as were carried on by the teachers, such as testing the germination of seeds, etc.

Our chief difficulty is in overcoming the prejudices of the parents. "What's the use! We can teach them all about Agriculture at home!" We are earnestly endeavoring to get the pupils to see the wonderful things that are constantly taking place about us. The scientific side is the one which captivates their young minds.

WM. CARNIE, *Sec. Treas.*
Bayfield, Ont.

S. S. No. 5, Delaware, Middlesex Co., Annie S. Rowland.

We consider that the teaching of Agriculture at a Public School is essential. Gardens at school and at the homes of the children are a great benefit which has been proven at our school.

G. S. IRELAND,
ALTON STEVENS,
Trustees.

S. S. No. 14, London, Middlesex Co., E. L. Birrell.

Garden was ploughed in fall of 1920 by one of the trustees. In the spring fertilizer was put on. Plot was also cultivated. Previous years we have had home plots but the pupils were not very enthusiastic over the work, and they were very unsuccessful. Now, since we have had a school plot for each pupil nearly every one has also a little plot at home. A few of the pupils have also planted their parents' gardens.

W. G. TAYLOR, *Sec. Treas.*,
Ettrick, Ont.

S. S. No. 10, Goderich, Huron Co., Margaret Lansing.

The children take great interest in their home gardens and grain plots, and also great pride in the window boxes at the school as shown by the care in watering and looking after them.

JOHN R MIDDLETON, *Sec. Treas.*,
Clinton, Ont.

S. S. No. 4, Stanley, Huron Co., E. Kathleen Elliott.

We find that the children respond in a most gratifying manner to the efforts to teach the science of Agriculture, while the home gardens show diligence and interest.

In the past years, with a view to broadening the vision and quickening the powers of observation of the pupils so that they would realize and enjoy the beauty which surrounds them, we have been encouraging the study of Nature—particularly birds, plants and insects.

WM. CARNIE, *Sec. Treas.*,
Bayfield, Ont.

School Fair organizations continue to do exceedingly important work in the rural schools. These organizations are under the charge of the Agricultural Representative, in co-operation with inspectors and teachers. Perth is now the only county without a representative.

For the information of teachers and inspectors the following list, correct to January 1st, 1922, is given below:

Agricultural Representatives of the Ontario Department of Agriculture

County	*Name*	*Address*
Algoma	J. M. McIntosh	Sault Ste. Marie
Brant	R. Schuyler	Paris.
Bruce	Campbell Lamont	Walkerton.
Carleton	D. J. Matheson	Carp.
Dufferin	H. A. Dorrance	Orangeville.
Dundas	W. C. Caldwell	Morrisburg.
Durham	F. C. Paterson	Port Hope.
Elgin	C. W. Buchanan	Dutton.
Essex	Justus Miller	Essex.
Frontenac	A. W. Sirett	Kingston.
Grenville	W. M. Croskery	Kemptville.
Glengarry	D. E. McRae	Alexandria.
Grey	T. S. Cooper	Markdale.
Haldimand	C. Frey	Cayuga.
Halton	R. R. Fleming	Milton.
Hastings	Ray Atkin	Stirling.
Huron	S. B. Stothers	Clinton.
Kenora	M. F. Cook	Dryden.
Kent	W. H. Smith	Chatham.
Lambton	W. P. Macdonald	Petrolia.
Lanark	F. Forsyth	Perth.
Leeds	E. F. Neff	Athens.
Lennox and Addington	C. C. Main	Napanee.
Lincoln	Geo. Wilson	St. Catharines.
Manitoulin	R. E. Cumming	Gore Bay.
Middlesex	R. A. Finn	London.
Muskoka and Parry Sound	R. S. Beckett	Huntsville.
Norfolk	G. G. Bramhill	Simcoe.
Northumberland	H. Sirett	Brighton.
Ontario	R. M. Tipper	Uxbridge.
Oxford	G. R. Green	Woodstock.
Peel	J. A. Carroll	Brampton.
Perth	M. C. McPhail	Stratford.
Peterborough	F. C. McRae	Norwood.
Prince Edward	A. P. Macvannell	Picton.
Prescott and Russell	F. Larose	Plantagenet.
Rainy River	I. F. Metcalfe	Emo.
Renfrew	M. H. Winter	Renfrew.
Simcoe, North	A. Hutchinson	Barrie.
Simcoe, South	J. J. E. McCague	Alliston.
Sudbury	D. J. Robicheau	Sudbury.
Timiskaming	W. G. Nixon	New Liskeard.
Thunder Bay—		
Port Arthur Section	L. M. Davis	Port Arthur.
Ft. William Section	G. W. Collins	Fort William.
Victoria	A. A. Knight	Lindsay.
Waterloo	J. S. Knapp	Galt.
Welland	R. J. Bryden	Welland.
Wellington	R. H. Clemens	Arthur.
Wentworth	W G. Marriit	18 Market St., Hamilton.
York	J. C. Steckley	Newmarket.

The Names and Addresses of Public and Separate School Inspectors who hold Intermediate Certificates in Agriculture

Bald, W. T., Port Elgin.
Bennett, J. M., 47 Browning Ave., Toronto.
Benson, J. E., Windsor.
Breuls, I. D., Pembroke.
Bryce, W., 3 Bowden Ave., Toronto.
Boyes, Robert, Campbellford.
Broderick, G. E., Lindsay.
Burgess, H. H., Owen Sound.
Campbell, A. L., Weston.
Carefoot, George A., St. Catharines.
Christie, D. M., Sudbury.
Clarke, H. J., Belleville.
Cole, J. M., Woodstock.
Colles, W. H. G. (Rev.), Chatham.
Colling, James, Bancroft.
Corkill, E. J., Napanee.
Conn, Henry, Sarnia.
Cook, H. F., Simcoe.
Craig, J. J., Fergus.
Craig, T. A., Kemptville.
Crewson, J. W., Alexandria.
Day, Isaac, Orillia.
Denyes, J. M., Milton.
Dowsley, W. C., Brockville.
Ferguson, T. R., Uxbridge.
Fetterly, H. B., Winchester.
Field, J. M., Goderich.
Finn, J. P., Peterborough.
Froats, James, Finch.
Galbraith, Robert, Mount Forest.
Galbraith, W. J., Brampton.
Garvin, J. L., Barrie.
Green, L. A., Sault Ste. Marie.
Hagan, J. W., Gore Bay.
Hamilton, W. J., Fort William.
Huff, Samuel, Meaford.
Irwin, William, Stratford.
Johnson, H. D., Strathroy.
Jones, Jas. E., Ottawa.
Jordan, A. A., 63 Orchard View Blvd., Toronto.
Kilmer, E. E. C., Brantford.
Lee, W. J., 434 Brunswick Ave., Toronto.
Lees, Richard, Peterborough.
Liddy, W. R., Orangeville.
Longman, E., Barrie.
Marshall, J. W., Welland.
Marty, Miss A. E., Toronto.
Michell, F. L., Perth.
Minns, J. E., Tweed.
Mitchener, J. L., Cayuga.
Moore, J. L., Parry Sound.
Moshier, D. D., Toronto.
Mulloy, C. W., Aurora.
McCool, John, Walkerton.
McDougall, N., Petrolia.
McGuire, J. F., Westport.
McNab, G. G., Renfrew.
McNiece, James, Welland.
Nelson, John, Vankleek Hill.
Norman, Lambert, Galt.
Odell, J. W., Cobourg.
Paterson, R. A., Ingersoll.
Pentland, G. E., Fenelon Falls.
Power, J. F., 33 Dalton Rd., Toronto.
Reid, M. R., Sharbot Lake.
Ritchie, John, Port Arthur.
Robinson, J. B., Hamilton.
Rose, R. C., Carleton Place.
Standing, T. W., Brantford.
Scovell, H. R., Bracebridge.
Sheppard, F. W., Kitchener.
Slemon, E. T., Ottawa.
Smith, F. P., Picton.
Smith, J. C., St. Thomas.
Smith, J. H., Chatham.
Smith, Jas. H., Stratford.
Snider, E. E., Port Hope.
Stevens, W. H., Lindsay.
Sullivan, J. F., London.
Taylor, J. A., St. Thomas.
Thompson, P. J., London.
Tom, J. E., Goderich.
Truscott, S. A., Kingston.
White, R. O., North Bay.
Wright, Robert, Hanover.

HIGH SCHOOLS

In some respects the High School is the most important of all our educational institutions. In this School the teachers are "grown", and the teacher is the most important factor in the Public School. Moreover, the High School is the most important factor in shaping the students' course for the future.

During the past year provision was made for a four-year course in agriculture in the High Schools which any student may elect and receive credit either for entrance to the University, the Normal School or the Ontario Agricultural College. The result of this change in examination requirements cannot of course be seen as yet. The chief difficulty in carrying out the intent of this change is the lack of qualified teachers.

As the High Schools provide for this change in curriculum, the number of Public School teachers able to teach Agriculture in the rural schools will be increased materially from year to year, resulting in an improved rural school.

The extent of the work in High Schools is indicated in the following table. The word "yes" means that classes in Agriculture were successfully maintained throughout that term and the word "no" means that the work was temporarily dropped.

Schools	1919 Jan. June	1919 Sept. Dec.	1920 Jan. June	1920 Sept. Dec.	1921 Jan. June	1921 Sept. Dec.
Collegiate Institutes—						
Brockville	yes	yes	yes	yes	yes	yes
Clinton	no	yes	yes	yes	no	yes
Cobourg	yes	yes	yes	yes	yes	yes
Ingersoll	yes	yes	yes	yes	yes	no
London	yes	yes	yes	no	no	no
Renfrew	yes	yes	yes	yes	yes	yes
Smith's Falls	yes	yes	yes	no	no	no
St. Thomas	yes	yes	yes	yes	yes	yes
Vankleek Hill	yes	yes	yes	no	no	no
High Schools—						
Almonte	...	...	...	...	...	yes
Arthur	yes	yes	yes	yes	yes	yes
Athens	yes	yes	yes	yes	yes	yes
*Beamsville	...	yes	yes	yes	yes	yes
Belleville	...	yes	yes	yes	yes	yes
Bowmanville	no	yes	yes	yes	yes	yes
Essex	no	yes	yes	yes	yes	yes
Georgetown	no	yes	yes	no	no	no
Haileybury	...	...	...	...	...	yes
Kincardine	yes	yes	yes	yes	yes	yes
Leamington	yes	yes	yes	yes	yes	yes
Mitchell	...	...	...	...	...	yes
Niagara Falls South	yes	yes	yes	yes	yes	yes
*Oakville	yes	yes	yes	yes	yes	yes
Port Hope	yes	yes	yes	yes	yes	yes
*Port Perry	yes	yes	yes	yes	yes	yes
Whitby	yes	yes	yes	yes	yes	yes
Williamstown	no	yes	yes	yes	yes	yes
Winchester	yes	yes	yes	yes	yes	yes
Wingham	yes	yes	yes	no	no	no
Continuation Schools—						
*Drayton	yes	yes	yes	yes	yes	yes
New Liskeard	yes	yes	yes	yes	yes	yes
Port Colborne	...	yes	yes	no	no	no
Ridgeway	yes	yes	yes	yes	yes	yes
Public Schools with Form V—						
Swansea, York County	...	yes	yes	no	no	yes
Thamesford, Oxford County	...	yes	yes	yes	yes	no
Thomasburg, Hastings County	...	...	...	...	...	yes
Todmorden, York County	...	...	...	...	...	yes

* Separate Departments of Agriculture.

The number of High Schools qualifying for grants since 1915 are here given:

	No. Schools	With Plots	No Plots		No. Schools	With Plots	No. Plots
1915				1919			
Jan.-June	11	..	11	Jan.-June	23	16	7
Sept.-Dec.	15	..	15	Sept.-Dec.	30	23	7
1916				1920			
Jan.-June	15	1	14	Jan.-June	32	29	3
Sept.-Dec.	20	1	19	Sept.-Dec.	25	24	1
1917				1921			
Jan.-June	20	7	13	Jan.-June	21	17	4
Sept.-Dec.	21	7	14	Sept.-Dec.	28	17	11
1918							
Jan.-June	21	16	5				
Sept.-Dec.	26	18	8				

Courses are provided at the Ontario Agricultural College covering two consecutive summers of five weeks each. These courses were introduced in 1913, and the number of teachers who have so far qualified each year for an Intermediate Certificate in Agriculture are given below:

1914, 12; 1915, 10; 1916, 15; 1917, 15; 1918, 9; 1919, 21; 1920, 25; 1921, 24.

Below are the names of those teachers who qualified in 1921:

Bodkin, G. L., B.A., Western.
Evans, Josiah J., B.A., Queen's.
Foster W. E.
Gowdy, Douglas.
Hamilton, R. S., M.A., Toronto.
Howard, Frances.
Ireland, Norval J., B.A., Toronto.
Joyce, W., B.A., Queen's.
Learoyd, C. W., B.A., Toronto.
Mathieson, Elsie.
McGill, G. W., M.A., Queen's.
McLaurin, J. L., B.A., McMaster.
McLaurin, P. C., B.A., McMaster.
Mitchell, W. J.
Morris, Clive M., M.A., Queen's.
O'Donohue, J. A.
Pigott, Margaret.
Rogers, Wm. C., M.A., Queen's.
Scott, Rena C.
Simpson, J. M., B.A., Queen's.
Smith, D.G.
Stilwell, Bertha E.
Strathdee, Mary.
Tucker, Mary Clara, M.A., Toronto.

FARM-MECHANICS.

Year.	Number.	Year.	Number.
1917	10	1919	10
1918	9	1920	8
		1921	7

The list of those who took the course in Farm Mechanics in 1921 is given below:

Carroll, W. J., B.A., Queen's.
Erwin, W. M., B.A., Queen's.
Morrison, W. J., B.A., Toronto.
Oliver, W. L.
Porter, W. A.
Smith, D. G.
Wheeler, H. A.

The following took Part III of the course leading to Specialists' certificates in Agriculture. An acceptable Thesis has yet to be submitted in order to complete the course:

Attwood, A. E., M.A., Queen's.
Bunton, G. W., M.A., Queen's.
Erwin, W. M., B.A., Queen's.
Gundry, A.P., B.A., Toronto.
McGill, D.H., M.A., Queen's
Miller, G. A., M.A., Queen's
Morrison, W. J., B.A., Toronto.
Wyndham W. B., B.A., Toronto.

Specialist's Certificate in Agriculture

The following, whose names are given below, have completed the course prescribed for Specialist standing in Agriculture and have submitted acceptable Theses:—

J. G. Adams, B.A., Queen's.
J. A. Anderson, B.A., Queen's.
G. E. Copeland, M.A., Queen's.
N. Davies, M.A., McMaster.
W. M. Erwin, B.A., Queen's.
A. R. McRitchie, B.A., Toronto.
F. P. Smith, M.A., Queen's.
G. S. Johnson, B.A., McMaster.

University standing, Summary
Including Farm Mechanics and Specialists
With Degrees,—

Queen's	76
Toronto	32
McMaster	16
Western	4
Victoria	3
	131
Without Degrees	76

THE NORMAL SCHOOLS

The regulations respecting the teaching of Agriculture in High Schools have recently been amended so as to make it possible for a student to secure an Elementary certificate in Agriculture without attendance at the summer courses. On the completion of a four years' course in Agriculture in a High School, followed by the usual course in a Normal School, a student will receive an Interim Elementary certificate in Agriculture.

The accommodation for teaching Agriculture in the Normal Schools is necessarily limited, but these schools, provided as they are with well-trained teachers, are meeting the needs of those expecting to teach Agriculture in rural schools.

The Normal Schools need better class-room accommodation so that more individual work may be done by the students. Plant houses are also needed.

Teachers of Agriculture in the Different Normal Schools

Hamilton	G. O. McMillan, M.A., B.Pæd., Queen's.
London	G. W. Hofferd, B.A., Queen's.
North Bay	H. E. Ricker, M.A., Queen's.
Ottawa	G. A. Miller, M.A., Queen's.
Peterborough	A. J. Madill, B.A., McMaster.
Stratford	J. W. Emery, B.A., D.Pæd., Toronto.
Toronto	David Whyte, B.A., Toronto.

All these men hold Intermediate Certificates in Agriculture.

The schools affiliated with the Normal Schools are given in the following list. These schools have all made a good start and it is hoped that efforts for advancement of such schools may be fostered and encouraged in every possible way. It is also hoped that some of these schools may, in the near future, become centres of consolidation.

Schools Affiliated							Teacher of Affiliated Schoo				
Normal School	Section No.	Township	Date of affiliation	Miles from Normal	Secretary	P.O. Address	Name of Teacher	Cert.	Certificate in Agricul.	Salary from Board	Salary from Dept.
Hamilton.....	5	Barton.....	Sept.,1916	2	Dr. J. H. Holbrook..	Mt. Sanitorium.....	Gladys. J. Hutty	II	Elem.	$1,000	$300
		Burlington Beach.....	"	6	Burlington B. Commission, Room 800, Bank of Hamilton	Hamilton.....	Laura Laventure	II	Elem.	1,200	300
	U3	W. Flamboro & Ancaster	Sept.,1918	6½	W. H. Brooking....	R.R. 3, Dundas.....	Deane Whitson..	I	Inter.	1,000	300
London.....	21	London.....	Sept.,1920	5	Thos. Patterson....	London.....	Wanless Evans..	II	Elem. Pt. I	1,000	300
	22	"	" 1918	4	R. Dengate.....	Ealing.....	Helen Paterson..	II	Elem.	800	300
	28	"	" 1921	4	Richard Oke.....	London.....	Annie Limon....	II	No Cert.	1,000	300
North Bay....	5	Widdifield...	Sept.,1916	9	W. J. Simmens.....	Feronia.....	J. B. Marshall...	II	No Cert.	1,200	300
	IB	Ferris.....	" 1916	2	James Pasmore.....	North Bay.....	Ethel Luckens ..	II	Elem.	1,100	300
Ottawa.....	3	Gloucester...	Sept.,1916	4½	F. T. Webster.....	Billings' Bridge.....	Ida C. Brownlee.	II	Elem.	1,100	300
	10	" ...	" 1919	3	W. H. Hartley.....	Hurdman's Bridge.....	Laura Huredith .	II	No Cert	1,200	300
	12	Nepean.....	" 1919	5	W. P. Jackson.....	City View.....	Frances A. Scott.	II	Elem.	1,100	300
Peterborough.	3	Smith.....	Sept.,1916	3	Percy Edmison.....	R.R. 2, Peterborough ..	Helen M. Grieve.	II	Elem.	950	300
	5	"	" 1916	6	G. D. Mann.....	Bridgenorth.....	Reg. A. Sutton..	II	No Cert.	950	300
	6	Otonabee....	" 1916	3	Alex. Huston.....	R.R. 2, Peterborough ..	Phyllis Borland .	II	Elem. Pt. I	1,000	300
Stratford.....	3	Downie.....	Sept.,1909	5½	Louis Goettler.....	Stratford, R.R. 3.....	M. Henry.....	II	Elem.	1,000	300
	U10	S. Easthope..	" 1919	7½	H. Harloff.....	R.R.4, Stratford.....	N. Beaumont...	II	Elem.	900	300
	6	Downie.....	" 1921	5	H. Stewart.....	R.R. 2, St. Pauls.....	C. E. Sims.....	II	Elem.	1,000	300
Toronto.....	1	King & Whitchurch....	Sept.,1921	20	Fred W. Legge.....	Oak Ridges.....	Janet Gillespie..	II	Elem.	1,100	300
	10	Etobicoke...	" 1919	12	Chas. C. Grubbe....	R.R. 3, Weston.....	Violet J. Liddle..	II	Elem.	1,100	300
	7	Etobicoke...	" 1919	15	Wm. Wallis.....	R.R. 3, Weston.....	V. O. Armstrong.	II	Elem. Pt. 1	1,100	300
	3	York.....	" 1920	6	E. F. Wood.....	Postal St'n.'K,' Toronto	Dorothy Jacques	II	No Cert.	1,100	300
	3	King & Whitchurch....	" 1921	24	Elton Armstrong...	Armitage.....	Bertha E. Stillwe'l	I	Inter.	1,000	300

SUMMER COURSES

The attendance upon the summer courses in Agriculture for teachers continues to increase from year to year. In fact, the accommodation, especially at the O. A. C., is scarcely adequate to meet the needs of the ever increasing numbers. The Ontario Ladies' College at Whitby ever since 1919 has met the needs of the overflow from the O. A .C., and both centres now have reached the limits of their accommodation. Moreover another centre at the Northern Academy, Monteith, is taking care of those teachers who live in Northern Ontario. Another additional centre may be established at the Agricultural School, Kemptville, in 1922.

As Mills Hall, the new dormitory for men at the O. A. C., was ready for occupation by the teachers attending the summer courses in 1921, there was ample accommodation for all. In many respects, the session of 1921 was the best on record, partly due to the fact that all of those in attendance were able to secure board and living accommodation on the campus.

The record of attendance for the different summer sessions since 1911, is given below in order that the increased attendance may be noted.

Whether the amendments to the High School course of study, making it possible for a student to take the work in Agriculture during the High School course instead of during the summer sessions, will reduce the numbers entering the summer sessions, remains to be seen.

Reports from Whitby and Monteith by the respective Principals of these two Summer Schools are given at the end of this report.

Attendance at the Ontario Agricultural College Summer Courses in Agriculture

Year	Elementary				Intermediate					Inspectors	Farm Mechanics	
	I		II		I		II		III	I II	—	Total
	Men	Women	Men	Women	Men	Women	Men	Women	Men	—	—	Total
1911.....	8	75	1	16	....	.....	....	.....	....	.....	.....	100
1912.....	16	65	2	23	....	.....	....	.....	....	.....	.....	106
1913.....	14	64	5	36	23	4	....	.....	....	.....	.....	146
1914.....	8	55	5	27	13	4	14	.....	....	.....	.....	126
1915.....	15	39	5	18	17	1	9	1	....	.....	.....	105
1916.....	11	99	9	31	15	3	14	1	....	.....	.....	183
1917.....	15	138	7	81	9	1	13	2	....	.....	10	276
1918.....	6	187	7	119	20	11	9	.....	9	79	9	456
1919.....	16	155	6	160	9	19	7	21	....	86	10	489
1920.....	28	125	10	135	7	25	19	.....	....	8	10	374
1921.....	62	167	36	86	24	15	16	8	7	.....	7	428

A glance at the above table will show that, since 1915, a marked progress has been made with respect to the attendance, even after the number of those taking the Inspectors' Course has been subtracted.

A considerable number of those who enter Part I of the Course leading to an Elementary certificate, for some reason or other do not complete the course by taking Part II. The following figures show the percentage of shrinkage and concerns the classes at Guelph only:—

Year	Number taking Part I Elementary	Year	Number completing Part II Elementary the following year	Decrease per cent.
1911	83	1912	24	71
1912	81	1913	41	50
1913	76	1914	32	58
1914	63	1915	23	63
1915	54	1916	40	26
1916	100	1917	88	12
1917	158	1918	126	20
1918	193	1919	166	14
1919	171	1920	145	15
1920	153	1921	122	20
1921	229			

Attendance at the Whitby Ladies' College Summer Courses in Agriculture

Year	Part I Elementary	Part II Elementary	Total
1919	70	..	70
1920	69	46	115
1921	80	50	130

Attendance at the Northern Academy, Monteith, Summer Courses in Agriculture

Year	Part I Elementary	Part II Elementary	Total
1920	23	.	23
1921	17	8	25

The Summer School In Agriculture, Whitby

(By Norman Davis)

At the third Summer School in Agriculture held at the Ontario Ladies' College, Whitby, there were one hundred and thirty-one students in attendance. About ninety applied for admission to Part I, but only eighty-one reported at the opening. In Part II there were fifty enrolled, about twenty less than in the first year class of 1920. The total attendance was sixteen more than last year.

The session was formally opened on Tuesday evening, July 5th., when Rev. Mr. Farewell, Principal of the Ladies' College, Dr. McGillivray, Secretary of the High School Board, and Colonel Farewell of Whitby, welcomed the students to the College and the town of Whitby. Each member of the staff also spoke and briefly outlined the work in his department.

The members of the staff and subjects taught were as follows:—

Norman Davies, B.A., of Renfrew Collegiate Institute, Principal, taught Poultry, Gardening, Part II Physics, and had charge of Sports and Games

J. A. Short, of Swansea Public School, taught Dairying, Horticulture, Floriculture and Beekeeping.

J. G. Adams, B A., of Beamsville High School, taught Chemistry, Soil, Weather and assisted in Gardening.

G. W. Hofferd, M.A., B. Paed. of London Normal School, taught Entomology and Bacteriology.

J. A. Anderson, B. A., of Brockville Collegiate Institute, taught Botany in its various branches.

R. M. Tipper, B. S. A., of Uxbridge, taught Field Husbandry and Animal Husbandry.

Miss Wallace and Miss Holland of the Ladies' College, had supervision of the dormitories and dining room.

All students, excepting four, and all members of the staff were in residence. The accommodation was ample in every respect. However, an attendance of more than one hundred and thirty-five would result in some crowding and discomfort in the rooms. Most of the classes were held at the High School, a ten minutes' walk from the College. Each year was divided into two sections. With forty in each first year division the groups were a little large for practical work in certain subjects. The second year divisions of twenty-five each were ideal for all classes. A larger attendance, especially in first year, would necessitate additions to the staff and changes in organization.

In all branches of the Course, stress was laid on practical work. The gardens were prepared and planted during the first week. Tomato plants were tied up during the fourth week. The gardens were cared for at times outside of regular classes. In Entomology practical work on life histories of insects was carried out in laboratory and experiments in value of various sprays conducted in the potato field at the College. In Horticulture and Floriculture, seeds and cuttings were planted and cared for. In Botany there were field excursions for collecting weeds, and observing and studying fungus diseases of grains and vegetables. In Part II Physics, the level was used for taking readings, from which a plan of drainage was drawn. In Animal Husbandry, various classes of stock were brought to the College and the lectures given in a tent erected for this work. This class also visited the barns of the Ontario Hospital Farm and observed the various up-to-date methods of stabling, feeding and caring for livestock. In Dairying, the students made the Babcock test for butter and cream; made butter in small laboratory churns and used the cream separator. The Beekeeping classes visited a nearby apiary and learned of the ways of bees at first hand. In Poultry, considerable attention was given to candling of eggs and one incubator was run throughout a hatch. In every subject practical demonstration was given to a greater degree than would seem possible at other than an Agricultural College.

On several occasions, visitors addressed the students. On the evening of July 15th, President Reynolds of the Ontario Agricultural College gave an interesting address on "National Dependence on Agriculture."

On Tuesday, July 19th, Dr. J. B. Dandeno, Inspector of Elementary Agricultural Classes, paid us an official visit; inspected the work and addressed the students.

On Tuesday, July 26th, Miss Dixon of Toronto gave a demonstration of various uses of the gramophone in schools.

On Wednesday, July 27th, we were honoured by a visit from The Honourable Mr. Grant, Minister of Education and the Legislative Committee on Education, Mr. Marshall, Mr. Cook, Mr. Swayze and Mr. Stringer. The morning was spent in visiting various class-rooms and inspecting the work being carried on. After luncheon the visitors addressed the students and expressed their satisfaction with the spirit in which all were carrying on their work. This visit was much appreciated by the staff and students.

Professor F. C. Elford, Dominion Poultry Husbandman, Ottawa, visited the school on July 28th, and gave two very instructive addresses on Poultry topics.

While the daily programme was strenuous, there were periods of relaxation and good times. Baseball and Tennis were the chief games and schedules were drawn up and played out. Classes were formed for all who wished instruction in swimming and diving and more than eight were enrolled. From eight to ten o'clock each evening the swimming tank was a very busy place and about twenty-five learned to swim. The two Field Days were very successful. The first afternoon, July 15th, was devoted to group games and every student and member of the staff took part. The second afternoon, July 29th, was for individual contests. Practically all students took part in every event and the competition for first place between the years was very close.

On Saturday, July 23rd, one hundred students and members of the staff went on an excursion to Niagara Falls. This was an ideal outing from Whitby and was thoroughly enjoyed by all. Through the kindness of the Superintendent and other officials of the Ontario Hospital for the Insane, and Chairman of the High School Board, the students were shown through the buildings of the Hospital and afterwards entertained to tea on the lawn. It was a very enjoyable and instructive afternoon for all.

The final social event of the Course was a concert given by the students in the Assembly Hall on the evening of Friday, July 29th. This was, without doubt, the best concert given in connection with the Whitby Summer School and showed a wealth of originality and talent among those in attendance.

The last week was a busy one for all and the Course closed at noon on Friday, August 5th.

Summer Course In Agriculture, Monteith

(By G. S. Johnson)

The Summer Course in Agriculture was held at the Northern Academy at Monteith. As in the past a large number signified their intention of attending but only a small proportion of these actually came. There were eight that had been in attendance during the Course of 1920 returned to take Part Two, and seventeen new pupils reported for Part One. A number of these were from Old Ontario and were sent to Monteith at their own request.

The Staff and the subjects taught were as follows :

Mr. Geo. S. Johnson, B.A., Principal of Northern Academy was Principal and taught Botany of the First Year.

Mr. H. E. Ricker, Science Master of the Normal School at North Bay, was Vice-Principal and taught Chemistry, Physics, Bacteriology, Weather, and Methods.

Mr. R. F. Downey, Principal of Peterborough Public School, taught School Gardening, Soils, Horticulture of Part One, Physics and Horticulture of Part Two.

Miss I. E. Dobbie, Principal of the Continuation School, New Liskeard, taught Dairying, Poultry, Floriculture, and Beekeeping.

Mr. G. E. Copeland, Science Master at Port Hope High School, taught Botany, Entomology and had charge of the Recreation and Games.

Mr. Chas. M. Laidlaw. Superintendent of the Demonstration Farm, Monteith, taught Field and Animal Husbandry.

The Course was the same as that followed at Guelph and at Whitby, but it was necessarily modified in some respects to suit the peculiar Agricultural situation as found in Northern Ontario.

The Demonstration Farm, which is situated along side of the Northern Academy provided excellent opportunities for the students to observe live stock and Northern Farm operations. Mr. Downey obtained splendid results from the School Garden, practically all of the crops including cabbage, turnips, beans, lettuce, radishes, onions, potatoes and tomatoes matured. It is of special interest to note that potatoes were in blossom about four weeks after they were planted and that mature tubers were obtained from the planting on July the 12th.

A most enjoyable day was spent at Iroquois Falls as guests of the Abitibi Power and Paper Company. No effort was spared to entertain them from the time they arrived early in the morning until they left late at night.

Dr. J. B. Dandeno, Inspector of Elementary Agricultural Classes, visited the School during the Course, and addressed the students upon the importance of the teaching of agriculture in the rural schools.

On Demonstration Day the School was visited by Honourable R. H. Grant, Minister of Education, Honourable Mr. Doherty, Minister of Agriculture, and Mr. George Lee, the Chairman of the T. & N. O. Commission.

APPENDIX G

ANNUAL REPORT OF THE INSPECTOR OF PUBLIC LIBRARIES

To the Honourable R. H. Grant, M.P.P.,
Minister of Education for Ontario.

Sir,—I have the honour to submit the following report of your Public Libraries Branch for the year 1921, and the statistics, etc., of the Public Libraries of the Province for 1920; also a statement of the grants paid in 1921 to Public Libraries, and to Historical, Literary, and Scientific Societies.

Startling progress is being made by the public libraries of the Province as a whole. Librarians report increasing rapidity in the growth of patronage, the libraries have doubled their expenditure for books during the last two years, the smaller libraries are showing a marked improvement, several new libraries were established in 1921, and the interest in travelling libraries has exceeded all expectations.

Summary

1. The addition of fourteen new libraries increases the total number to 450.

2. The use of Travelling Libraries in 1921 was 41 per cent. greater than in 1920.

3. Librarians report an unprecedented increase in the circulation of books for home reading for 1921. Official records for 1920 (our latest) show an increase of 800,000 for 1920 over 1919. Better incomes for 1921, due to the new Act, which made more generous book-buying possible, with the aggressive work of libraries, were probably responsible for the large increase reported informally for 1921. There is no doubt but the total patronage of 1921 was not far from 8,000,000.

4. Expenditure for books has doubled in two years. This gives great satisfaction. Former reports have shown that book purchasing was not keeping pace with library patronage; the increase in purchases from year to year was very small; the need for larger expenditures was explained and persistently urged by the Public Libraries Branch and, with the new Act in force, gratifying success has been won. Association libraries, which gain little by the new Act also show larger purchases to an extent never shown before.

5. The rural, village and small town libraries, which are chiefly of the association type, have advanced more in the last year or two than in any previous several years. Recent library improvement in the smaller places is very encouraging.

6. The grants earned by the libraries in 1921 were 22 per cent. greater than in 1919, due almost altogether to the work of the small libraries. The larger libraries had been earning the maximum for several years. A larger appropriation will be required for 1922. The amount voted for grants has varied very little in several years.

7. The results of the new Act have been satisfactory for the first year. All increased expenditures as far as we have record have been wisely made. The large increases in book purchasing, which were so desirable, indicate the chief benefit

gained from the new rate clause. Several of the larger libraries have improved their service and given well-deserved increases in salary to librarians and assistants.

8. A successful library training school was held.

9. Better office accommodation and library equipment were provided for the Public Libraries Branch.

10. An important event of the year was Canadian book-week in which authors, publishers and book-sellers carried on an aggressive campaign of publicity. Public libraries have always endeavoured to promote an interest in Canadian books and entered into the spirit, giving all the co-operation possible. Many of our libraries use the story hour for children as a means of instilling the ideas of good Canadian citizenship.

Increase in Library Patronage

The chief aim of the modern public library is to reach all the people possible with the right books.

The value of libraries lies in the service that they render; in the quantity as well as the quality. It is a matter for congratulation that the patronage of the libraries is growing at such a rapid rate. An increase of one-third in two years is a sure indication that our libraries as a whole are succeeding in their chief aim. One is surely impressed with the fact that there is a very large demand for books throughout the Province. Public demand has always followed provision to serve a large patronage. To what limits the unexpressed demand really extends one can scarcely estimate. The people of Ontario are reading double the number of books from public libraries that they read eight years ago. The increase is due very largely to increased expenditure for books and by well directed effort on the part of the librarians and trustees. While the average patronage has reached what we might term a reasonable standard, there is a marked difference between the smallest per capita circulation of books and the largest. There is still room for many of our libraries to reinforce their efforts in order to meet the maximum demand—whatever that may be.

The critic naturally asks the question: What about the quality of the reading? We can safely say that we have good reason to believe that the quality is improving as rapidly as the quantity. Departmental records show an improvement in the quality of the book selection in the average-sized and smaller libraries and, secondly, the standard of librarianship is being improved from year to year. Ontario has added more than 200 trained persons to its library forces during the last six years through the agency of the Department Training School for Librarianship.

Increase in Book-Purchasing

There is a real relationship between library patronage and annual purchase of books. Your Public Libraries Branch through its official publication the "Ontario Library Review" has urged persistently that the matter of annual expenditure for books receive serious consideration.

The great majority of the libraries seemed anxious to extend their usefulness but their book purchasing on the average was below the standard necessary to meet the patronage that was already obtaining. Two or three years ago the total expenditure for books was not more than the modest sum of $68,000. In the year 1920 the total expenditure was $140,000; in other words the increase in two years was greater than all the increases for the previous quarter century. We

have good reason to believe that 1921 will show a larger increase than has yet been shown in one year. The new Act can be largely credited with the increased book expenditure; but libraries must be credited with taking hold and spending to their limit shortly before they could reap the benefits of the new Act. Increased book expenditure means more to library success than is generally supposed.

Number of Libraries in the Province

Ontario has stood first for several years in having the largest number of libraries in proportion to its population of any country, state or province in the world. With its 450 libraries Ontario has the lead by a more comfortable margin than ever. It is highly desirable to increase our number under Part I of the Act rather than under Part II. Establishment under Part II is often the first step toward reorganization under Part I. We could add very rapidly to our total number by carrying on an aggressive campaign for new libraries under Part II, but equally aggressive work should be carried on to increase the list of those working under Part I. We are proud of our long list of libraries, but we should not forget that there are probably 800,000 people in the Province who are still without library facilities.

Interest in Travelling Libraries

It sounds big to say that there has been an increase of 41 per cent. in the use our travelling libraries. We are pleased to record such an increase in 1921 as compared with 1920, but the work we are doing is very slight in comparison with what could be done. No department of education anywhere has a larger or more difficult travelling library problem than has the Ontario Department of Education. When we consider that our Province covers 407,000 square miles, that it is as large as France and Germany combined, and that the population is less than three million, we begin to realize what it would mean to serve all the sparsely settled parts of the Province with travelling library privileges. We have a collection of less than 30,000 volumes and not more than 300 travelling library cases. The Branch has been able to fill all applications sent in. The demand increased somewhat on account of publicity given in publications that reach the rural districts. Under present conditions with our enlarged office space we can meet a larger demand, but we would not be justified in carrying on an aggressive campaign throughout the thinly settled parts of the Province since the demand would be so great that we would be unable to meet more than a fraction of it.

The Department or the Branch has never very carefully defined the limits of the service that travelling libraries should attempt to perform. Practical experience has not brought us face to face with any serious difficulties. The only embarrassing requests that are ever received are from communities that are well able to secure library service at their own expense. The Department's best efforts are unlikely to be directed toward giving more than a limited service through the agency of travelling libraries: 1, the travelling libraries should serve those sparsely settled districts where it is not practicable to establish a small local public library under the Public Libraries Act: 2, should serve rural districts where a public library is in progress of oganization. Service to all rural Ontario regardless of favorable conditions for the establishment of local libraries would incur a tremendous cost.

The travelling library can never serve the purpose of a local library except for one phase of library service, namely, that of furnishing interesting books that would not necessarily form an essential part of a permanent collection. There is

a certain number of books suited to the use of children; and such books should never be absent from any community. Likewise there are a few score of books that should be continuously within the reach of the people of any district in the Province. Every community should own a sort of standard collection of books. The travelling library—either County or Provincial—seems to be the only solution for circulating the books of the year. A third necessary factor would be a highly organized central library from which special students could secure the best kind of library service.

The travelling libraries are in need of being buttressed on the one side by a small permanent collection of the books-of-all-time, and on the other side by special service for special needs. The Departmental travelling library books are of necessity a popular collection. The books necessarily are suited to the needs of the general reader. Although there are nearly 30,000 volumes in the collection, there is a much smaller number of titles, as hundreds of the most worthy are purchased in large numbers. This is especially the case with Canadian literature and books pertaining to Canada.

Women's Institutes and other rural organizations frequently hear about our service at conventions, and it is quite probable that there will be an increased demand for travelling library service in communities where local libraries should be established. These Institutes and clubs are doing a great deal to make rural life more interesting, and we wish to give credit to many of them for taking the initiative in the establishment of small rural libraries. Although we have met with no serious practical difficulties there is a strong probability that the Department will be compelled to limit travelling library service to the more thinly populated parts of the Province and refuse applications in the better settled parts, on the ground that the travelling library resources cannot meet more demands than those made in the poorer and more sparsely settled sections.

Results of the New Public Libraries Act

The Report of last year contained the comments of leading library authorities and the opinions of the press on the Public Libraries Act of 1920. Last year gave public library boards their first opportunity to gain the benefits from the new Act. All reports and references to practical experience under the Act have been favourable. We were reasonably sure that satisfactory results would follow the passing of the statute. The claimable rate was a reasonable one provided that it was expended in a well-proportioned budget and that the personal service was of the right kind. Your inspector had one lingering doubt in that he feared that a library board here and there would expend the money without giving the right quality of service. A few boards might have been expected to have increased their expenditure without improving the service. As far as we have any knowledge, increased expenditures have been made in the right direction and boards, with perhaps a single exception, have either expended more for books or for superior personal service, or have not taken advantage of the rate clause where the increased expenditure would not have conferred an increased benefit on the public. The very great increase in book expenditure should be credited largely to the working of the new Act and as has already been suggested the large response from the public is a source of very great satisfaction.

The change in the method of apportioning grants from statute to regulation has been well justified, especially in the case of struggling libraries in the smaller places. In deserving cases the Minister has been able to offer special assistance in the form of small amounts.

Numerous favourable comments have been made since the issue of the last annual report. The American Library Association has already placed itself on record as being in favour of the per capita principle. Your Inspector of Public Libraries, in compliance with the request of the A.L.A., explained the principles o the Act at the convention which was held at Swampscott, Massachusetts, in June, 1921.

All indications point to library prosperity under the new Act.

Work with Boys and Girls

Work with boys and girls has received special emphasis in our leading libraries for several years. It has taken hold remarkably well in the smaller libraries of late. The last year has shown a great advance. Your Branch is using every means to encourage this work in the smaller libraries. Appropriate lists are furnished to aid librarians in book-selection. One number of the Ontario Library Review in 1921 was devoted exclusively to articles on work with boys and girls contributed by children's librarians. Our Governor-General in a visit to the Toronto Public Library showed great interest in the department for boys and girls, and complimented the chief librarian on the work that was being done in developing good citizenship. Canadian subjects are receiving special attention in the story-hour in many of our libraries. The following is quoted from a written statement by Mr. Locke, the chief librarian of the Toronto Public Library.

"Our work with boys and girls is deliberately planned and educational in its object. This is the main reason for its success. Our story-hours are carefully prepared and we never lose sight of the great central thought of all our work, the development of intelligent Canadian citizenship. This objective is not on the surface and glaringly apparent as is the case in many of the so-called citizenship or civics courses in schools. If it were, our case would be prejudiced from the start. We believe that the essence of education lies in suggestion and we leave it at that. We provide the environment in which this suggestion may flourish, but we do not direct it.

"Biography, the history of individuals whose lives have been interesting, gives us the starting point for all our stories and wherever possible the relationship to Canadian history and Canadian affairs is always incorporated. Our aim is to be increasingly successful with the same children—continuous, not continual success is what we are achieving. Our girls and boys are growing up with us and we seek not new audiences but gradual additions to our audiences."

Library School

A course similar to that of the previous two years was held in 1921. More satisfactory results were gained, however, by limiting the class to thirty students, and by adopting a more systematic method for the selection of candidates. All applicants, except those holding university degrees or having honour matriculation standing, were required to pass an entrance examination which included questions on history, literature and current events. Selection in this way resulted in all students gaining certificates.

Accommodation was again afforded by the Toronto Public Library Board and the chief librarian, Mr. George H. Locke. For the sixth consecutive year, Mr. Locke and those in charge of the various departments of the Toronto Public Library assisted the Department by lecturing in a number of branches of library science, and also afforded facilities for practice work in the various branches of the system.

The universities, in addition to the Toronto Public Library, gave practising privileges to three students who expected to enter university work. Of the students, three attended from other provinces, and forty-three per cent. were university graduates.

The time has come when we should have a special course for training the librarians of the smaller towns, and the time is not far distant when we shall require a second part to our three months' course in order to give more extended training. Special arrangements should also soon be made for training in addition to that given in the course, especially for children's librarians and cataloguers.

Library Visits

A good number of libraries were visited and in each case affairs were inspected with a thoroughness that has brought about good results. Selection of libraries was limited to those where the time for reorganization seemed favourable, and all the time available was given to that work. It was distinctly of the intensive type, each library dealt with requiring a considerable amount of construction and assistance.

One great difficulty in assisting librarians through personal advice and direction is that there are so many who have not the necessary training to carry out advice when it is given. However, through our various agencies there is a marked general improvement. Two of the library assistants in the Branch visited smaller libraries among the number that were visited and similar visits will be made from time to time.

The institutes supplement the visits and the "Ontario Library Review" is having a good effect. Some visits have been made in the interests of organizing new libraries and we hope the Minister's idea of carrying on further organization work by members of the staff will come to be realized.

Special Associations

Grants have been paid to the Frontier College, the Canadian National Library for the Blind, and the Ontario Library Association. The three institutions are doing good work.

Statistics

I present on pages 268-277 a statement of the statistics of the Public Libraries of the Province, and a statement of the grants paid to Historical, Literary, and Scientific Institutions.

I have the honour to be, Sir,
Your obedient servant,

W. O. Carson,
Inspector of Public Libraries.

Toronto, February 20th, 1922.

APPENDIX H

REPORT OF THE INSPECTOR OF AUXILIARY CLASSES

To the Honourable R. H. Grant, M.P.P.,
Minister of Education for Ontario.

Sir:—

I have the honour to submit for your consideration the following report on Auxiliary Classes for the year 1921.

I have the honour to be, Sir,
Your obedient servent,
S. B. Sinclair,
Inspector Auxiliary Classes.

Toronto, February 17, 1922.

During the year 1921 the number of Auxiliary Classes conforming to regulation standard increased from twenty-six to forty-three. Windsor, Guelph, Kitchener, St. Catharines, Brantford and Hamilton Public School Boards, and Windsor Separate School Board, each established one Auxiliary training class. The London Public School Board established two classes and the Toronto Board seven classes. Toronto also established a Myopia class, and appointed a visiting teacher for disabled children, and one for Lip-Reading classes.

There is need for the establishment of other types of Auxiliary classes, but the most urgent need still is the providing of better educational facilities for psychopathic children and high grade defectives, usually called morons, who, in adult life, will have more than 7 and less than 11 years mentality, and who constitute the most serious problem for school and society. Reports from various countries, an extended observation of such classes in the United States, and experience in Ontario during the year, all furnish increasing evidence to confirm the fundamental principles, on which such classes are established, as follows:—

A small percentage of school population is sufficiently subnormal or psychopathic to be unable to profit by ordinary school instruction. The mental age of these children can be determined to within a few months.

Idiots and imbeciles who will never reach a mentality of more than six years, and dangerous psychopathic children are better at home or in an institution.

Other children, who, without such reason as illness or absence from school, are at least two years older than the average age of children of their school grade, and who after an examination are found to be of not less than five years mental age and to require special treatment, are better placed in an Auxiliary training class with a course of study suited to their special needs, and under a specially trained teacher.

It is usually possible in a large Elementary School to select from the Primary classes three pupils, each ten years old, one with a mental age of 5 years and Intelligence Quotient or I. Q. of 50% (5 divided by 10), another with mental age of 7 years (I. Q. 70), and the third with mental age near or quite up to normal but with marked nervous disability.

These subnormal children are neither idiots nor imbeciles (i.e they will have an adult mental age of more than seven years) but they are unable to keep pace with other pupils whose I. Q's range from 75 to 125 or higher. If left in an

ordinary class, their slow educational advance is a source of discouragement and worry to their parents, to the teacher and to themselves, and a hindrance and usually an irritation to other pupils.

If the teacher spends time on the impossible task of bringing them up to class standard, the other pupils are idle. If she goes forward without them, they usually create disturbance or lapse into indifference and many of them in later years become a burden upon and often a menace to society. If placed in a training class they develop into happy and helpful citizens.

When adequate provision is made for such children, in special classes, the resulting advantage to the teacher and to the remaining children of the ordinary class, to the child himself and to society, far outweighs the additional cost involved.

Experience has demonstrated that when the Auxiliary class room is up to the average standard, and other conditions are satisfactory, the parent who understands the situation is always pleased with the transfer.

During the year, in response to requests from School Boards, training class surveys were conducted in the Public Schools of eleven cities, and in the Separate Schools of four cities.

The proper diagnosis of such pupils is both important and difficult. The special examination was confined to psychopathic children, and to those who, at their previous rate of progress, would be three years behind the average in the class when they reached the age of 12 years. The teachers, nurse, physician, parents and the children themselves, rendered sympathetic and valuable service in furnishing information regarding the life history, characteristics and reactions of the child at home and at school. The selected children were given an Intelligence measurement examination which was conducted as privately as possible. A standardized revision of the Binet-Simon tests was used and a record kept of answers of doubtful appraisement. All psychopathic children were examined by a physician who is also a psychiatrist.

Fifty-five teachers satisfactorily completed the summer course of training for Auxiliary Class work. Practically all of these are now engaged in teaching, and with the increased demand it will be necessary to hold another summer school this year.

If these classes are to function efficiently, provision must be made for class room conditions and sufficient salaries to induce teachers with special aptitude to attend the preparatory course and undertake the work. A circular has been issued containing a detailed statement of the special permanent equipment for Auxiliary Training Classes, which is covered by Government Grant, and a pamphlet is being prepared containing suggestions for teachers.

The need for special education for subnormal and psychopathic children in rural districts, is as great as for city children. The Department is making a study of the best way to meet this requirement.

APPENDIX I

REPORT OF THE PROVINCIAL SCHOOL ATTENDANCE OFFICER

To the Honourable R. H. Grant, M.P.P.,
Minister of Education for Ontario.

Sir:—

I have the honour to submit herewith my annual report on School Attendance.

I have the honour to be,
Sir,
Your obedient servant,
J. P. Cowles.
Provincial School Attendance Officer.

Toronto, January, 1922.

Number of Attendance Officers

The total number of school attendance officers appointed for the year 1921 was 1,357; 851 in rural, 444 in urban municipalities, and 62 in territory without municipal organization. In two cases the appointments were made by county councils and in twenty-four cases urban boards united in the appointment of officers for duty in both public and separate schools.

General Improvement in Attendance

Reports from attendance officers show an increase in total enrolment and a steady improvement in regularly of attendance, but because of the increase in enrolment the improvement in regularity will not likely be reflected in the percentage of attendance records as shown by the school statistics. The system of finding average and percentage attendance from the total enrolment and the aggregate attendance for the year is recognized as misleading, since many children begin attending school after Easter or in September, while others leave at the end of June and yet all these are considered, in finding average attendance, as pupils enrolled for the entire year, with the result that the average and percentage attendance as recorded is much below the true mark. While this system must be continued, yet as soon as teachers begin to report in addition the aggregate possible attendance of their pupils other more exact comparisons may be made.

As an illustration of attendance in the rural schools of the older settled parts of the province reference may be made to the county of Wentworth, where the percentage of attendance in the rural schools, urban and suburban schools being excluded, was 87 for the month of November, a high standard for this month with its variable weather.

It may be of interest to note the change in attendance during the last decade. In 1911, according to the Dominion Census, the population of Ontario was 2,527,292, and in 1921, according to published statements, 2,931,264 thus showing an increase of 15.98%. The enrolment in the elementary schools of the province in 1910 was 510,700 with an average attendance of 306,593. In 1920

the enrolment was 604,923, being an increase of 18.44%, while the average attendance was 393,141, an increase of 29.20%. That is to say, while the population of the province increased 15.98%, the enrolment increased 18.44% and the average attendance increased 29.20%.

The Officers, their Duties and Salaries

It is pleasing to be able to state that the relationship between the appointing bodies and the attendance officers is becoming more intimate and sympathetic. The efficient attendance officer is no longer regarded as a mere official whose duty it is to summon neglectful parents before a magistrate. He is himself recognized as delinquent if he does not attempt to discover and to remove, by an appeal to proper authority, the causes which produce truancy and irregularity. His duties therefore require patience, tact and perseverance. He may often be an intermediary between the school and the home and can do much to smooth away causes of friction which prevent a child's steady progress in his class. He knows where charity may be dispensed and, endeavouring to enlist the services of every body which interests itself in the welfare of boys and girls, he co-operates with all good social agencies. He brings to the attention of the officers of the Children's Aid Society, the Mothers' Allowance Commission, and other institutions such cases as need their special care. In the case of adolescents who must leave school he acts in the capacity of a vocational guide himself, or in harmony with any local juvenile placement agency which endeavors intelligently to put young people in employment and to guide their after steps so that they may make satisfactory progress in their chosen work. In addition to this he must be able to lay before the local education authorities reports and information from which they may be able to organize and maintain for the handicapped and for the part-time pupils special classes to which reference is made later in this report. In connection with this duty there should be mention of the provisions made in several places for the education of boys and girls over fourteen years of age who are out of school for some time and not in regular employment. Lists of these adolescents presented to boards by attendance officers resulted in the formation of special ungraded classes under strong and competent teachers, who are using every effort to render fit for full citizenship young people who otherwise were bidding fair to become not assets but liabilities of the province. Particular mention might be made of the work being done in this respect by the attendance department and the boards of Windsor.

In some cases local appointing bodies fail to realize the value of the work to be done by efficient officers, and neglect to pay salaries sufficient to attract men and women of the right type. Salaries vary greatly. In urban centres for full time the range is from about $1,000.00 to $2,500.00 per annum. In rural communities few officers are paid more than fifty cents per school per month, though preventable irregularity is, on the whole, greater in rural than in urban communities. In spite of the inadequate salaries paid, many, very many, excellent officers have accepted appointments, and I should like to commend to you their regard for children, their knowledge of school organization, their faith in education, their tact and good judgment, their vision by which looking into the future they see the children of to-day the adults of to-morrow, living amid conditions even more complex and exacting than those of to-day. In order to induce appointing bodies to pay more adequate salaries, it may seem wise to you to consider apportioning some part of the grants paid to schools on the basis of regularity in attendance and the salaries paid the local officers.

The Adolescent School Attendance Act

The Adolescent School Attendance Act has come into effect very quietly. In no other country or state, so far as can be learned, has an extension of the limit of compulsory schooling been made with so little friction as in Ontario. This condition is due mainly to two reasons: first, to the very gradual enforcement of the Act by stages, and second, to the preparation made by the Legislature and the Department for such a law by the passing of such Acts as the permissive-mandatory Act of 1912 and 1916 and the Industrial Education Act, with the provision for Advisory Committees. It is true, too, that there has been but little demand for juvenile labour during the past year.

Some interesting figures have been received in connection with the attendance at school of adolescents of the fourteen and fifteen-year-old young group; for example, in St. Catharines practically all th fourteen-year-old young people are in the schools, 312 out of a possible 337.

St. Catharines, Windsor and Fort William illustrate three different ways in which the education authorities have made an independent census of the school children; St. Catharines by the senior pupils under the guidance of the teachers and the direction of the board and attendance officer; Windsor by the teachers themselves; and Fort William by the attendance officer during the mid-summer vacation. Such a census, made by the school authorities, will discover pupils not enrolled on the register of any school, among them children handicapped physically or mentally, and will provide information for the board in planning for extension of accommodation.

The vital test of the Adolescent School Attendance Act will probably come when part-time courses are established next September. In the organization and maintenance of these classes boards of education and of school trustees will have an opportunity of showing what can be done by local education authorities in providing courses to meet local conditions. School attendance officers of the municipalities concerned should be able to furnish information to assist the education authorities in planning such courses. They will be able to present the names, ages and addresses of all adolescents fourteen and fifteen years of age who require part-time instruction, the nature and situation of their occupations, their educational qualifications and special aptitudes, and also their desires in relation to special courses or subjects which may be provided. With this information properly arranged and classified, the local authorities should have little difficulty in designing courses of study which will not only interlock the school life of the child with his chosen calling, but will provide a course for broader citizenship.

While a discussion upon the question of accommodation, except in so far as lack of accommodation may be regarded as an excuse for non-attendance at school, does not properly lie in my province, yet I should like to mention how boards of growing urban centres are coping with the problem of increased attendance. Some are using portable schools; others are utilizing basements and assembly halls; while others still are renting houses, shops or halls and making needful alterations to render them suitable for class room purposes. It would seem practicable for boards to consider similar methods in solving the problem to be presented next September when Section 9 of the Adolescent School Attendance Act requiring the establishment of part time courses of instruction in urban centres of five thousand population, becomes operative.

APPENDIX J

REPORT OF THE DIRECTOR OF PROFESSIONAL TRAINING

To the Honourable R. H. Grant, M.P.P.,
Minister of Education for Ontario.

I have the honour to submit a report on the work of the Provincial Schools for the training of teachers for the year 1921.

The year 1921 has made a most satisfactory contribution toward the attainment of the high ideal set by the educators of Ontario half a century ago, that no person should be intrusted with the care of a school without a reasonable measure of professional training. Not only has there been a general increase in the number of young men and women who have entered the training schools during the year, but it is especially gratifying to note that there is a marked increase in the number of those who have enrolled in the courses leading to life certificates. It may be mentioned in this regard that the enrolment of candidates for High School Assistants' certificates shows an increase of 68 over the previous year, that of candidates for First Class Public School certificates, an increase of 25, and that of candidates for Second Class Public School certificates an increase of 150. Visits of inspection were made to the various training and practice schools during the year, the condition of the schools and the character of the instruction being in general satisfactory.

Enrolment

The following is a statement of the number of applicants admitted during the year to the various courses at the College of Education, and the Normal and Model Schools.

	Males.	Females.
To the High School Assistants' Course	51	88
To the Domestic Science Course		12
To the First Class Course	60	118
To the Second Class Course	157	1,182
To the Kindergarten-Primary Course		327
To the Third Class Course	14	127
To the District Certificate Courses	29	331

A noteworthy feature of the training classes for 1921, is the enrolment of 51 veterans of the Great War as teachers-in-training at the different schools. Of this number 28 are in attendance at the College of Education as candidates for High School Assistants' certificates.

Graduating Students

The following table gives the number and grade of certificates issued to successful students graduating from the various Training Schools during 1921:

High School Assistants' certificates	70
Domestic Science certificates	13
First Class certificates	155
Second Class certificates	1,068
Limited Third Class certificates	229
Kindergarten-Primary certificates	120
District certificates	325

Ideals of the Ontario Training Schools

In any adequate scheme of teacher training due emphasis must be placed upon the academic preparation of candidates for professional certificates. Owing, however, to the high standards of scholarship maintained by the High Schools and Colleges of Ontario, where candidates for teachers' certificates for the most part receive their academic preparation, the Provincial Training Schools are largely relieved of the labour of giving purely academic instruction. There does remain to the training school, however, the necessity of leading the teacher-in-training to realize how academic knowledge is intended to meet the requirements of life. A first aim of the training school is, therefore, to lead its students to understand how the so-called subjects of study enter as a means into their real work of developing and training for right living the bodies, minds and characters of the children with whom they are to be entrusted.

It is further realized by our training schools that academic knowledge, however broad, does not necessarily make a teacher, and that he who would practise a profession must master both in theory and in practice the principles and methods of his profession. Thus a second great aim of the training school is to acquaint the teacher-in-training with the fundamental problems with which he will be confronted, with the laws of mental activity and with the bearing of these laws upon his work of directing and instructing the child; and to develop in him by adequate observation and practice, a measure of skill in the art of teaching.

Finally it is realized by our training schools that the ultimate work of the teacher will depend largely upon his own ideals and habits of life. A supreme concern is, therefore, the character and the amount of discipline the student is giving to his own life while a teacher-in-training. Hence it is aimed to have the candidate for the teaching office so discipline himself mentally and morally that he may go out into life, not with a desire to labour for selfish ends, but with a realization that his mission is the betterment of humanity and that he can fulfil this mission only through a life of self-denying service.

Musical Education

Through their efforts with the young teachers leaving the Normal Schools, the Instructors in Music at these Institutions are especially endeavouring to give a new impetus to the teaching of music in the elementary schools. In this connection investigations have been made at the Normal and Normal Model Schools during the year as to the value of the phonograph in school work. The results thus far indicate that this instrument may be made of real value in teaching music appreciation, in physical culture exercises, in teaching rote songs and in the story work and games of the junior classes. A further study of the problem is to be made during 1922.

Changes in Staffs

The following is a statement of the changes in and additions to the staffs of the Provincial Normal and Normal Model Schools made during 1921. These included both appointments to fill vacancies arising through resignations and additions made to certain staffs to provide for increases in attendance.

S. J. Keyes, B.A., D.Paed., transferred from the Toronto Normal School to the Ottawa Normal School, to fill the vacancy caused by the resignation of Dr. W. J. Karr.

H. W. Kerfoot, B.A., appointed an additional master at the Ottawa Normal School.

John W. Firth, B.A., appointed master at the Toronto Normal School to fill the vacancy caused by the transfer of Dr. Keyes to Ottawa.

J. G. McEachren, B.A., B.Paed., appointed an additional master at the London Normal School.

Miss E. M. Everson, appointed Instructor in Household Science at the Stratford Normal School to fill the vacancy caused by the resignation of Miss F. McNally, B.Sc.

Miss L. Monahan, appointed Instructor in Household Science at the Ottawa Normal School to fill the vacancy caused by the resignation of Miss M. G. McEwen.

W. E. McKendry, B.A., appointed an assistant at the Ottawa Normal Model School to fill the vacancy caused by the resignation of Miss J. Foster.

Thornton Mustard, appointed Headmaster of the Toronto Normal Model School to fill the vacancy caused by the resignation of Milton A. Sorsoleil, B.A.

Clarence D. Bouck, appointed assistant at the Toronto Normal Model School to fill the vacancy caused by the promotion of Thornton Mustard.

Charters T. Sharpe, appointed assistant at the Toronto Normal Model School to fill the vacancy caused by the resignation of John F. Montgomery, B.A.

Frederick W. Schnick, appointed an additional assistant at the Toronto Normal Model School.

Miss Edith V. Phillips, appointed assistant at the Toronto Normal Model School to fill the vacancy caused by the resignation of Miss C. E. Kniseley.

Miss Maud Watterworth, appointed an additional assistant at the Toronto Normal Model School.

A detailed statement of the statistics of the Provincial Training Schools is presented in Appendix V, pages 323-326.

Teachers' Institutes

Annual Conventions were held by the 96 Teachers' Institutes throughout the Inspectorates of the Province. Practically all of these meetings were visited by Departmental Lecturers selected from the staffs of the Provincial Training Schools. It is worthy of note that a number of Institutes held their conventions at points of educational interest outside their own Inspectorates, thus enabling their members to acquaint themselves at first hand with important educational advances in other parts of the Province. Further information regarding the Teachers' Institutes is given in Appendix L on pages 278-281.

Your obedient servant,

S. A. Morgan,

Toronto, January, 1922.

APPENDIX K

STATISTICS OF ELEMENTARY AND SECONDARY SCHOOLS

Summary

I. ELEMENTARY SCHOOLS

a. Public Schools

Number of Public Schools in 1920		6,207
Increase for the year	28	
Number of enrolled pupils of all ages in the Public Schools during the year (exclusive of Continuation and Night School pupils)		488,091
Increase for the year	16,362	
Average daily attendance of pupils		310,029
Increase for the year	1,321	
Percentage of average attendance to total attendance		63.52
Decrease for the year	1.92	
Number of persons employed as teachers in the Public Schools: men, 1,397; women, 10,756; total		12,153
Increase for the year	350	
Number of teachers who attended Normal School		9,248
Increase for the year	316	
Number of teachers who attended Normal College or Faculty of Education		1,212
Increase for the year	56	
Number of teachers with a University degree		138
Increase for the year	30	
Average annual salary for male teachers		$1,575
Increase for the year	$227	
Average annual salary for female teachers		$1,000
Increase for the year	$183	
Average experience of male teachers		13.2 years
Average experience of female teachers		7.9 years
Amount expended for teachers' salaries		$12,056,057
Amount expended for Public School Houses (sites and buildings)		$4,327,472
Amount expended for all other purposes		$6,460,518
Total amount expended for Public Schools		$22,844,047
Increase for the year	$6,013,201	
Cost per pupil (enrolled attendance)		$46.80
Increase for the year	$11 13	

b. Roman Catholic Separate Schools

Number of Roman Catholic Separate Schools in 1920		594
Increase for the year	35	
Number of enrolled pupils for all ages		76,881
Increase for the year	2,048	
Average daily attendance of pupils		52,370
Increase for the year	3,081	
Percentage of average attendance to total attendance		68.11
Increase for the year	2.25	
Number of teachers		1,716
Increase for the year	130	
Amount expended for teacher's salaries		$1,013,981
Amount expended for school houses (sites and buildings)		$465,099
Amount expended for all other purposes		$893,385

Total amount expended on R. C. Separate Schools		$2,372,465
Increase for the year	$351,684	
Cost per pupil (enrolled attendance)		$30 85
Increase for the year	$3 85	

c. Protestant Separate Schools

Number of Protestant Separate Schools (included with Public Schools, *a*) in 1920		5
Decrease for the year	1	
Number of enrolled pupils		412
Decrease for the year	52	
Average daily attendance of pupils		260
Decrease for the year	54	

d. Night Elementary Schools

Number of Night Schools in 1920-21		15
Increase for the year	4	
Number of pupils enrolled		1,569
Increase for the year	726	
Number of teachers engaged		40
Increase for the year	17	

II. SECONDARY SCHOOLS

a. High Schools and Collegiate Institutes

Number of High Schools (including 47 Collegiate Institutes) 1920-21		168
Increase for the year	1	
Number of pupils enrolled in High Schools		34,128
Increase for the year	1,092	
Average daily attendance of pupils		28,952
Increase for the year	2,136	
Percentage of average to total attendance		84.83
Increase for the year	3.66	
Number of teachers in High Schools		1,207
Increase for the year	39	
Average annual salary, Principals		$2,563
Increase for the year	$350	
Average annual salary, Assistants		$1,987
Increase for the year	$224	
Average annual salary, all Teachers		$2,067
Increase for the year	$239	
Highest salary paid		$4,500
Increase for the year	$100	
Amount expended for teachers' salaries, 1920		$2,269,387
Amount expended for school houses (sites and buildings)		$364,264
Amount expended for all other purposes		$955,282
Total amount expended on High Schools, 1920		$3,588,933
Increase for the year	$840,891	
Cost per pupil, enrolled attendance		$105.16
Increase for the year	$21.98	

b. Continuation Schools

Number of Continuation Schools, 1920-21		144
Increase for the year	7	
Number of pupils in attendance		5,823
Increase for the year	697	
Average daily attendance of pupils		4,790
Increase for the year	835	
Percentage of average to total attendance		82.26
Increase for the year	5.11	
Number of teachers		255
Increase for the year	11	
Average annual salary, Principals		$1,579
Increase for the year	$276	

Average annual salary, Assistants		$1,229
Increase for the year	$300	
Highest salary paid		$3,000
Increase for the year	$900	
Amount expended on teachers' salaries, 1920		$317,602
Amount expended for school houses (sites and buildings)		$34,774
Amount expended for all other purposes		$120,709
Total amount expended on Continuation Schools, 1920		$473,085
Increase for the year	$84,384	
Cost per pupil, enrolled attendance		$81.24
Increase for the year	$5.42	

c. Night High Schools

Number of Night High Schools in 1920-21		31
Increase for the year	7	
Number of pupils enrolled		5,411
Increase for the year	369	
Number of teachers engaged		188
Increase for the year	22	

d. Industrial, Technical, and Art Schools

Number of Day Industrial, Technical and Art Schools, 1920-21		13
Increase for the year	1	
Number of full time pupils enrolled		2,600
Average daily attendance of full time pupils		2,123
Number of part time pupils in Day Schools		907
Number of special pupils in Day Schools		1,019
Number of teachers engaged in Day Schools		191
Increase for the year	14	
Number of Evening Industrial, Technical and Art Schools, 1920-21		51
Increase for the year	2	
Number of pupils enrolled		27,297
Increase for the year	770	
Number of teachers engaged		909
Increase for the year	64	
Amount expended on teachers' salaries, day and evening schools, 1920		$455,902
Amount expended on school houses (sites and buildings)		$514,919
Amount expended for all other purposes		$377,084
Total amount expended on day and evening industrial, technical and art schools, 1920		$1,347,905
Increase for the year	$688,832	

III. GENERAL

Elementary and Secondary Schools

Pupils enrolled in elementary schools, 1920		564,972
Pupils enrolled in night elementary schools, 1920-21		1,569
Pupils enrolled in secondary schools, 1920-21		44,477
Pupils enrolled in night high schools, 1920-21		5,411
Pupils enrolled in evening industrial, technical and art schools, 1920-21		27,297
Total enrolment, all schools		643,726
Increase for the year		21,800
Percentage of total population enrolled		22
Total expenditure		$30,626,435
Increase for the year	$7,978,992	

Average cost per pupil (enrolled attendance) in all Schools

	1902	1907	1912	1917	1919	1920
Teachers' salaries	$7 63	$10 44	$14 26	$17 97	$20 17	$25 03
Sites and buildings	0 97	2 86	5 90	4 05	5 31	8 86
All other expenses	2 80	4 40	5 34	7 72	10 95	13 68
For all purposes	11 40	17 70	25 50	29 74	36 43	47 57

Comparative School Statistics, 1867-1920

I. PUBLIC AND SEPARATE SCHOOLS

These elementary school tables 1, 2, 3, 4, and 5, for the purpose of comparison with previous years in which the Separate Schools were included with Public Schools, include Roman Catholic and Protestant Separate Schools. The tables A, B, C, D, and E give the statistics of the Public Schools, including Protestant Separate Schools; the statistics of the R. C. Separate Schools are given in Tables F and G; those of the Protestant Separate Schools appear in Table T; and the Night Schools in Table U.

1. School Population Attendance

The school population (5 to 16 and 5 to 21 years) of the Province, as ascertained by the assessors, and the school attendance are given in the following table:

Year	Population 5 to 16 years	Population 5 to 21 years	Total number of enrolled pupils	Boys	Girls	Average daily attendance	Percentage of average attendance to total number attending school
1867	447,726	.....	401,643	213,019	188,624	163,974	40.82
1872	495,756	.....	454,662	238,848	215,814	188,701	41.50
1877	494,804	.....	490,860	261,070	229,790	217,184	44.25
1882	483,817	.....	471,512	246,966	224,546	214,176	45,42
1887	.....	611,212	493,212	259,083	234,129	245,152	49.71
1892	.....	595,238	485,670	253,091	232,579	253,830	52.26
1897	.....	590,955	482,777	251,677	231,100	273,544	56.66
1902	.....	584,512	454,088	232,880	221,208	261,480	57.58
1907	.....	590,285	448,218	229,794	218,424	266,503	59.45
1912	.....	609,127	467,022	239,187	227,835	291,210	62.35
1917	512,562	628,996	527,664	266,255	261,409	342,571	64.92
1919	513,600	652,264	546,562	275,628	270,934	357,997	65.49
1920	527,921	667,379	564,972	285,362	279,610	362,399	64.14

2. Classification of Pupils

Year	Kindergarten	Kindergarten-Primary	1st Reader, Part I, or Primer	1st Reader, Part II, or 1st Book	2nd Book	3rd Book	4th Book	5th Book, or beyond 4th Book
1867	.....	.....	.....	*79,365	98,184	83,211	68,896	71,987
1872	.....	.....	.....	*160,828	100,245	96,481	67,440	29,668
1877	.....	.....	.....	*153,630	108,678	135,824	72,871	19,857
1882	.....	.....	.....	*165,834	106,229	117,352	71,740	10,357
1887	.....	.....	115,657	76,704	100,533	108,096	81,984	10,238
1892	.....	.....	114,932	73,015	96,074	99,345	88,934	13,370
1897	.....	.....	110,567	70,808	91,330	99,682	89,314	21,076
1902	.....	.....	107,441	69,062	85,732	90,630	83,738	17,485
1907	.....	.....	112,552	60,194	84,622	89,371	85,752	15,727
1912	.....	.....	126,100	67,368	92,728	88,811	85,213	† 6,802
1917	16,515	2,793	125,321	73,996	106,034	105,062	91,989	† 5,954
1919	16,386	7,560	128,826	75,171	106,107	110,115	97,069	† 5,328
1920	16,529	9,195	131,262	76,859	106,969	114,715	103,275	† 6,168

Note.—Kindergarten attendance is not included for the years previous to 1917.
* In 1st Reader. † Exclusive of Continuation School Pupils.

The following table classifies the pupils in various forms, as to rural and urban schools :

Rural Schools

Year	Kindergarten	Kindergarten-Primary	First Reader Part I or Primer	First Reader Part II or First Book	Second Book	Third Book	Fourth Book	Fifth Book or beyond Fourth Book	Totals
1904	.....	.....	60,784	36,941	47,930	50,297	47,289	9,892	253,133
1907	.....	.....	60,470	31,538	46,219	48,247	46,815	8,958	242,247
1912	.....	.....	62,712	30,293	43,775	42,450	44,049	† 3,984	227,263
1917	.....	.. 75	58,290	30,657	44,407	43,834	41,321	† 2,926	221,510
1919	.....	1,923	59,526	30,422	42,373	44,430	40,559	† 2,403	221,636
1920	.....	2,035	60,065	30,748	43,107	45,182	42,660	† 2,647	226,444
Urban Schools (cities, towns and incorporated villages.)									
1904	.....	.....	44,456	27,800	37,299	39,814	35,815	6,304	191,488
1907	.....	.....	52,082	28,656	38,403	41,124	38,937	6,769	205,971
1912	.....	.....	63,388	37,075	48,953	46,361	41,164	† 2,818	239,759
1917	16,515	2,718	67,031	43,339	61,627	61,228	50,668	† 3,028	306,154
1919	16,386	5,637	69,300	44,749	63,734	65,685	56,510	† 2,925	324,926
1920	16,529	7,160	71,197	46,111	63,862	69,533	60,615	† 3,521	338,528

† Exclusive of Continuation School pupils.

The following table compares the attendance and gives the percentages from rural and urban municipalities for several years :

Year	Attendance in Rural Schools	Attendance in Urban Schools
1903	..260,617 or 57.88% of total	189,661 or 42.12% of total
1907	..242,247 or 54.05% "	205,971 or 45.95% "
1912	..227,263 or 48.66% "	239,759 or 51.33% "
1917	..221,510 or 41.97% "	306,154 or 58.02% "
1919	..221,636 or 40.55% "	324,926 or 59.44% "
1920	..226,444 or 40.08% "	338,528 or 59.91% "

NOTE:—Kindergarten attendance for years previous to 1916 not available for the above tables.

3. Teachers' Certificates

Year	Number of teachers	Male	Female	1st Class	2nd Class	3rd Class	Kindergarten-Primary	Kindergarten	Manual Training	Household Science	Other certificates, including old County Board, Dist. and Temp	Teachers who attended Normal School	*Normal College or Faculty of Education
1867	4,890	2,849	2,041	1,899	2,454	386	....	....	....	..	151	666	.....
1872	5,476	2,626	2,850	1,337	1,477	2,084	....	....	....	..	578	828	.....
1877	6,468	3,020	3,448	250	1,304	3,926	....	....	....	..	988	1,084	.....
1882	6,857	3,062	3,795	246	2,169	3,471	....	....	....	..	971	1,873	.....
1887	7,594	2,718	4,876	252	2,553	3,865	....	....	....	..	924	2,434	.....
1892	8,680	2,770	5,910	261	3,047	4,299	....	200	....	..	873	3,038	.....
1897	9,351	2,784	6,567	343	3,386	4,465	....	223	....	..	934	3,643	.....
1902	9,614	2,294	7,320	608	4,296	3,432	....	247	....	..	1,031	4,774	.....
1907	10,170	1,783	8,387	715	3,887	3,452	....	277	....	..	1,839	4,587	.....
†1912	11,128	1,511	9,617	674	6,419	1,804	....	371	....	..	1,860	6,705	614
†1917	12,762	1,317	11,445	1,106	8,784	1,317	66	310	33	38	1,108	9,203	1,053
†1919	13,389	1,328	12,061	1,246	9,193	1,159	130	283	48	73	1,257	9,697	1,223
†1920	13,869	1,506	12,363	1,303	9,544	1,160	237	181	61	72	1,311	10,090	1,280

*For the years previous to 1912 the numbers who attended Normal College or the Faculty of Education are included in the preceding column.

The men engaged in teaching in these schools in 1920 formed 10.85 per cent. of the whole number. In 1919 they formed 9.91 per cent.

The number of teachers and the class of certificates, in the Public Schools alone, in each County and District of the Province will be found in Table C of this Appendix.

The following table classifies the teachers and certificates as to rural and urban schools:

	Teachers			Certificates		
	Total	Male	Female	1st Class	2nd Class	3rd Class
Rural Schools, 1904	5,974	1,469	4,505	152	1,944	3,107
Rural Schools, 1907	6,038	1,201	4,837	180	1,542	3,079
*Rural Schools, 1912	6,143	894	5,249	165	3,002	1,463
*Rural Schools, 1917	6,455	655	5,800	343	4,232	1,129
*Rural Schools, 1919	6,597	558	6,039	348	4,362	958
*Rural Schools, 1920	6,714	616	6,098	330	4,503	908
Urban (cities, towns and incorporated villages), 1904	3,580	606	2,974	483	2,248	289
Urban, 1907	4,132	582	3,550	535	2,345	373
*Urban, 1912	4,985	617	4,368	509	3,417	341
*Urban, 1917	6,307	662	5,645	763	4,552	188
*Urban, 1919	6,792	770	6,022	898	4,831	201
*Urban, 1920	7,155	890	6,265	973	5,041	252

In the rural schools in 1920 the men formed 9.17 per cent., and in the urban schools, 12.43 per cent. of the number of teachers employed in each case.

* Exclusive of Continuation School teachers.

4. Teachers' Salaries and Experience

Teachers' Salaries

Year	Highest salary paid	Average salary, male teacher, province	Average salary, female teacher, province	Average salary, male teacher, cities	Average salary, female teachers, cities	Average salary, male teachers, towns	Average salary, female teacher, towns	Average salary, male teacher, incorporated villages	Average salary, female teacher, incorporated villages	*Average salary, male teacher, rural schools	*Average salary, female teacher, rural schools	Average salary, male teacher, all urban schools	Average salary, female teacher, all urban schools
	$	$	$	$	$	$	$	$	$	$	$	$	$
1867.	1,350	346	226	532	243	464	240	.....	.....	261	189	.....	.....
1872.	1,000	360	228	628	245	507	216	.....	.....	305	213	.....	.....
1877.	1,100	398	264	735	307	583	269	.....	.....	379	251	.....	.....
1882.	1,100	415	269	742	331	576	273	.....	.....	385	248	.....	.....
1887.	1,450	425	292	832	382	619	289	.....	.....	398	271	.....	.....
1892.	1,500	421	297	894	402	648	298	.....	.....	383	269	.....	.....
1897.	1,500	391	294	892	425	621	306	.....	.....	347	254	.....	.....
1902.	1,600	436	313	935	479	667	317	.....	.....	372	271	.....	.....
1907.	1,900	596	420	1,157	592	800	406	659	372	458	379	907	453
1912.	2,200	788	543	1,320	703	977	519	779	492	566	493	1,141	618
1917.	2,500	1,038	650	1,637	795	1,166	628	908	573	686	580	1,425	731
1919.	2,800	1,348	817	2,024	1,130	1,372	749	1,064	671	807	663	1,780	991
1920.	3,500	1,575	1,000	2,150	1,262	1,674	941	1,254	839	1,059	868	1,964	1,146

* Incorporated villages included from 1867 to 1902 inclusive.

Increases in salaries in the cities, towns, villages and rural schools are shown in the above table. In Table C the average salaries for 1920 of the Public School teachers of the various Counties and Districts are given separately, and summarized for the cities, towns and villages. This table also states the salaries paid to teachers according to the grade of certificate held, and illustrates to what extent the teacher with the higher certificate commands the higher salary. The average salaries for the Province are as follows:

	Male				Female			
	1912	1917	1919	1920	1912	1917	1919	1920
First Class certificates.....	$1,340	$1,548	$1,960	$2,104	$634	$728	$898	$1,075
Second Class certificates....	757	916	1,101	1,367	587	673	844	1,034
Third Class and District certificates.....	524	562	664	873	458	507	592	768

Teachers' Experience

The length of service or experience of the teachers engaged in the Public Schools is also shown in Table C, where the numbers who have taught from less than one year up to forty years and over are given for each year.

The average experience in the Public Schools at the end of 1920 was as follows:

Male teachers 13.2 years.

Female teachers, 7.9 years.

All teachers, 8.5 years.

5.Receipts and Expenditures

Year	Receipts				Expenditures					
	Legislative grants	Municipal school grants and assessments	Clergy reserve funds balances and other sources	Total receipts	Teachers' salaries	Sites and buildings school houses	Libraries, maps, apparatus, prizes, etc.	Rent, repairs, fuel and other expenses	Total expenditure	Cost per pupil
	$	$	$	$	$	$	$	$	$	$ c.
1867.....	187153	1151583	331599	1670335	1093517	149195	31354	199123	1473189	3 67
1872.....	225318	1763492	541460	2530270	1371594	456043	47799	331928	2207364	4 85
1877.....	251962	2422432	730687	3405081	2038099	477393	47539	510458	3073489	6 26
1882.....	265738	2447214	757038	3469990	2144449	341918	15583	525025	3026975	6 42
1887.....	268722	3084352	978283	4331357	2458540	544520	27509	711535	3742104	7 59
1892.....	283791	3300512	1227596	4811899	2752629	427321	40003	833965	4053918	8 40
1897.....	366538	3361562	1260055	4988155	2886061	391689	60585	877335	4215670	8 73
1902.....	383666	3959912	1422924	5766502	3198132	432753	86723	1107552	4825160	10 62
1907.....	655239	6146825	2455864	9257928	4389524	1220820	213096	1732739	7556179	16 85
1912.....	842278	9478887	3936887	14258052	6109547	2777960	167755	2218698	11273960	24 14
1917.....	907846	12193439	4168000	17269285	8398450	1987644	290207	3435534	14111835	26 74
1919.....	1316529	14364049	6912656	22593234	10160399	2870349	302046	5518833	18851627	34 49
1920.....	1612837	18766800	9413521	29793158	13070038	4792571	333288	7020615	25216512	44 63

The increase for the year in the amount paid as teachers' salaries was $2,909,639. The total expenditure increased by $6,364,885.

These tables show the expenditure per pupil for the years as given below:

Average cost per pupil (enrolled attendance)

	1902	1907	1912	1917	1919	1920
Teachers' salaries	$7 04	$9 79	$13 08	$15 91	$18 59	$23 13
Sites and buildings	0 95	2 72	5 95	3 77	5 25	8 48
All other expenses	2 63	4 34	5 11	7 06	10 65	13 02
For all purposes	10 62	16 85	24 14	26 74	34 49	44 63

Average cost per pupil (average attendance)

	1902	1907	1912	1917	1919	1920
Teachers' salaries	$12 23	$16 47	$20 98	$24 52	$28 38	$36 07
Sites and buildings	1 65	4 58	9 54	5 80	8 01	13 22
All other expenses	4 57	7 30	8 19	10 87	16 26	20 29
For all purposes	18 45	28 35	38 71	41 19	52 65	69 58

The expenditure per pupil (enrolled attendance) for 1920 in the Public Schools alone will be found in Table E, and for the R. C. Separate schools in Table F. The expenditure will there be shown as to rural schools, cities, towns, and villages separately.

II. ROMAN CATHOLIC SEPARATE SCHOOLS

Year	Schools, Teachers and Attendance						
	Schools open	Teachers	Pupils	Boys	Girls	Average daily attendance	Percentage of average attendance to total number attending schools
1867	161	210	18,924	.....	.....	8,606	45.47
1872	171	254	21,406	.....	.....	10,584	49.44
1877	185	334	24,952	.....	.....	12,549	50.29
1882	190	390	26,148	.....	.....	13,574	51,91
1887	229	491	30,373	15,376	14,997	16,866	55.52
1892	312	662	37,466	19,169	18,297	21,560	57.54
1897	340	752	41,620	21,342	20,278	24,996	60.05
1902	391	870	45,964	23,314	22,650	28,817	62.69
1907	449	1,034	51,502	26,420	25,082	33,500	65.04
1912	513	1,237	61,297	31,126	30,171	39,735	64.82
1917	548	1,488	70,048	35,036	35,012	46,919	66.98
1919	559	1,586	74,833	37,132	37,701	49,289	65,86
1920	594	1,716	76,881	38,209	38,672	52,370	68.11

Receipts and Expenditures

Year	Receipts				Expenditures					
	Legislative grants	Municipal school grants and assessments	Balances, subscribed and other sources	Total receipts	Teachers' salaries	Sites and building school houses	Libraries, maps, apparatus prizes, etc.	Rent, repairs, fuel and other expenses	Total expenditure	Cost per pupil
	$	$	$	$	$	$	$	$	$	$ c.
1867.	9,993	26,781	11,854	48,628	34,830	.....	.....	†7,889	42,719	2 26
1872.	12,327	41,134	15,349	68,810	45,824	.....	.....	†15,993	61,817	2 88
1877.	13,607	72,177	34,482	120,266	70,201	24,510	2,811	17,284	114,806	4 60
1882.	14,382	97,252	55,105	166,739	84,095	36,860	1,303	32,082	154,340	5 13
1887.	16,808	147,639	65,401	229,848	112,293	48,937	3,624	46,369	211,223	6 95
1892.	21,043	206,698	98,293	326,034	149,707	65,874	2,922	71,335	289,838	7 74
1897.	26,675	224,617	84,032	335,324	168,800	41,233	5,786	86,350	302,169	7 26
1902.	30,472	293,348	161,683	485,503	210,199	100,911	6,158	118,173	435,441	9 47
1907.	40,524	442,316	308,540	791,380	281,484	186,908	15,991	229,793	714,176	13 86
1912.	51,846	757,255	377,713	1,186,814	456,800	308,193	15,207	263,024	1,043,224	17 01
1917.	63,127	1,066,253	370,346	1,499,726	635,089	262,103	24,836	391,695	1,313,723	18 75
1919.	99,047	1,257,992	946,309	2,303,348	797,523	361,890	25,997	835,371	2,020,781	27 00
1920.	133,672	1,646,452	887,185	2,667,309	1,013,981	465,099	30,865	862,520	2,372,465	30 85

† Including all expenditure except for Teachers' salaries.

An increase of 2,048 in the enrolment and of $351,684 in the expenditure in 1920 are noticed in the above tables. The expenditure per pupil of enrolled attendance increased from $27.00 to $30.85. Detailed statistics in reference to these schools will be found in Tables F and G.

III. PROTESTANT SEPARATE SCHOOLS

The following is a complete list of the Protestant Separate Schools of the Province:—No. 1 Grattan, No. 2 Hagarty, L'Orignal, and Penetanguishene (two schools).

They were attended by 412 pupils in 1920. The whole amount expended for their maintenance and permanent improvements was $15,805.96. One teacher held a First Class Certificate, nine teachers held Second Class certificates, and one held a District certificate.

Complete statistics for these schools will be found in Table T.

IV. CONTINUATION SCHOOLS

The following table gives statistics of the "Continuation Classes, Grade A," up to and including 1907. Thereafter they are known as "Continuation Schools." Formerly the statistics of these schools were included with the statistics of the Public and Separate Schools, consequently certain items for the years 1897-1907 cannot be given.

Year	Schools	One-teacher schools	Two-teacher schools	Three-teacher schools	Number of teachers	Receipts		Expenditure		Total value of Equipment	Number of Pupils	Percentage of average attendance to total attendance
						Legislative grant	Total Receipts	Paid for Teachers' Salaries	Total Expenditure			
						$	$	$	$	$		
1897.....	27	20	7	....	34	2,700	.....	.....	.....	.....	1,275	.....
1902.....	59	46	12	1	73	8,350	.....	.....	.....	.....	1,856	.....
1907.....	91	65	24	2	119	25,610	.....	73,325	.....	26,345	3,993	.....
1912.....	138	54	73	11	226	64,081	295,261	202,875	265,087	75,556	6,094	61.97
1917.....	137	36	99	2	*241	65,733	360,431	228,362	324,621	93,228	*5,104	*73.15
1919.....	137	31	104	2	*244	70,356	438,891	253,654	388,701	103,290	*5,126	*77.15
1920.....	144	36	100	8	*255	113879	548,411	317,602	473,085	117,629	*5,823	*82.26

* For school year ended six months after the calendar year specified.

Of the enrolled attendance for 1920-21, 4,524 pupils were in the Lower School and 1,299 in the Middle School. The total attendance was made up of 2,304 boys and 3,519 girls.

Average Cost per pupil, enrolled attendance

	1917	1919	1920
Teachers' salaries.....	$44 74	$49 48	$54 54
Sites and buildings.....	6 33	9 86	5 97
All other expenses.....	12 53	16 48	20 73
For all purposes.....	63 60	75 82	81 24

Average Cost per pupil (average attendance)

	1912	1917	1919	1920
Teachers' salaries.....	$53 71	$61 15	$64 13	$66 30
Sites and buildings.....	4 17	8 66	12 78	7 26
All other purposes.....	12 30	17 12	21 37	25 20
For all purposes.....	70 18	86 93	98 28	98 76

Statistics in detail for 1920-21 in reference to the Continuation Schools will be found in Tables H, I, J and K.

V. COLLEGIATE INSTITUTES AND HIGH SCHOOLS

The following table gives comparative statistics respecting Collegiate Institutes and High Schools from 1867 to 1920, inclusive:—

1. Receipts, Expenditure, Attendance, etc.

Year	Schools	Teachers	Receipts			Expenditure			Pupils	Percentage of average attendance to total attendance
			Legislative grant	Amount of fees	Total receipts	Paid for teachers' salaries	Paid for sites and buildings	Total expenditure		
			$	$	$	$	$	$		
1867.....	102	159	54,562	15,605	139,579	94,820	*19,190	124,181	5,696	55
1872.....	104	239	79,543	20,270	223,269	141,812	*31,360	210,005	7,968	56
1877.....	104	280	78,762	20,753	357,521	211,607	*51,417	343,710	9,229	56
1882.....	104	332	84,304	29,270	373,150	253,864	*19,361	343,720	12,348	53
1887.....	112	398	91,977	56,198	529,323	327,452	*73,061	495,612	17,459	59
1892.....	128	522	100,000	97,273	793,812	472,029	*91,108	696,114	22,837	60
1897.....	130	579	101,250	110,859	767,487	532,837	*46,627	715,976	24,390	61
1902.....	134	593	112,650	105,801	832,853	547,402	44,246	769,680	24,472	58.97
1907.....	143	750	158,549	138,396	1,611,553	783,782	193,975	1,213,697	30,331	60.94
1912.....	148	917	209,956	145,685	2,414,128	1,232,537	327,982	1,953,061	32,273	62.80
1917.....	162	†1,051	184,088	154,825	3,051,684	1,554,049	277,544	2,418,975	†29,097	†78.15
1919.....	167	†1,168	170,812	196,256	3,166,222	1,801,602	261,733	2,748,042	†33,036	‡81.17
1920.....	168	†1,207	176,159	194,893	4,065,050	2,269,387	364,264	3,588,933	†34,128	†84 83

* Expenses for repairs, etc., included.
† For the school year ended six months after the calendar year specified.

Average cost per pupil (enrolled attendance)

	1917	1919	1920
Teachers' salaries.....	$53 41	$54 53	$66 50
Sites and buildings.....	9 54	7 92	10 67
All other expenses.....	20 18	20 73	27 99
For all purposes.....	83 13	83 18	105 16

Average cost per pupil (average attendance)

	1902	1907	1912	1917	1919	1920
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
Teachers' salaries.....	37 93	42 40	60 81	68 34	67 18	78 38
Sites and buildings.....	3 07	10 49	16 18	12 20	9 76	12 58
All other purposes.....	12 34	12 76	19 37	25 83	25 53	33 00
For all purposes.....	53 34	65 65	96 36	106 37	102 47	123 96

Number of Pupils in the three grades of schools in the Collegiate Institutes and High Schools

	1916-17	1919-20	1920-21
Lower School	20,190	23,344	24,166
Middle School	7,336	8,170	8,471
Upper School	1,571	1,522	1,491
Total enrolment	29,097	33,036	34,128
Total number of boys	12,353	14,681	15,221
Total number of girls	16,744	18,355	18,907

2. Occupation of Parents of Pupils attending High Schools and Collegiate Insititutes

	1917-18	1919-20	1920-21
Commerce	6,516	7,717	8,118
Agriculture	8,449	8,688	8,583
Law, Medicine, Dentistry or the Church	1,531	1,569	1,711
Teaching	511	479	529
The Trades	5,734	6,812	7,236
Labouring Occupations	1,899	2,506	2,813
Other Classes	4,457	5,265	5,138

3. Destination of Pupils, Etc.

Year	Destination of Pupils					Number of schools charging fees	Number of free schools
	Mercantile life	Agriculture	Law, Medicine or the Church	Teaching	The Trades		
1867	.....	.....	.....	.....	.....	67	36
1872	486	300	213..	.....	.....	28	76
1877	556	328	564..	.....	.....	35	69
1882	881	646	751..	.....	.....	37	67
1887	1,141	882	1,189..	.....	.....	58	54
1892	1,111	1,006	398	1,527..	.....	77	51
1897	1,368	1,133	409	2,056..	.....	87	43
1902	1,573	743	388	1,238..	.....	82	52
1907	1,982	803	401	1,436..	.....	81	62
1912	2,178	855	370	1,490	531	82	66
1917-18	2,742	1,557	*339	1,407	667	85	77
1919-20	2,872	1,242	*598	1,104	659	87	80
1920-21	3,417	1,322	*692	1,131	787	89	79

The statistics in detail of the various Collegiate Institutes and High Schools of the Province for 1920 will be found in Tables L, M, N and O.

* Including Dentistry.

VI. TEACHERS' INSTITUTES

This table presents the work of the Teachers' Institutes for forty-four years:

Year	No. of Teachers' Institutes	No. of Members	No. of Teachers in the Province. (High School teachers not included)	Receipts				Expenditure	
				Amount received from government grants	Amount received from municipal grants	Amount received from members' fees	Total amount received	Amount paid for Libraries	Total amount expended
				$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
1877	42	1,181	6,468	1,412 50	100 00	299 75	2,769 44	.....	1,127 63
1882	62	4,395	6,857	2,900 00	300 00	1,088 84	9,394 28	453 02	5,355 33
1887	66	6,781	7,594	1,800 00	1,879 45	730 66	10,405 95	1,234 08	4,975 50
1892	69	8,142	8,680	1,950 00	2,105 00	875 76	12,043 54	1,472 41	6,127 46
1897	73	7,627	9,351	2,425 00	2,017 45	901 15	12,446 20	1,479 88	6,598 84
1902	77	8,515	9,614	2,515 00	1,877 50	1,171 80	13,171 26	1,437 18	7,188 45
1907	81	9,319	10,170	2,850 00	1,920 00	1,671 32	14,824 09	654 16	7,487 41
1912	83	*9,913	11,128	3,800 00	2,100 78	1,961 10	22,120 70	1,359 24	10,120 89
1917	94	*12,460	12,762	5,475 00	3,701 62	3,821 23	27,712 01	3,173 12	13,977 20
1919	95	*12,767	13,389	6,475 00	4,405 89	4,368 55	33,635 06	7,423 73	19,431 68
1920	96	*13,303	13,869	5,514 20	3,937 57	5,116 54	31,441 88	5,120 72	17,915 96

See Appendix L for details for 1920. * Registered attendance of members.

VII. DEPARTMENTAL EXAMINATIONS, Etc.

1. Table showing the Number of Teachers in Training at Provincial Normal Schools, and the Pupils at the Normal Model Schools in connection therewith, etc., 1877-1922

Year	No. of Normal School teachers	No. of Normal School students	No. of Normal Model School and Kindergarten teachers	No. of Normal Model School and Kindergarten pupils
1877	13	257	8	643
1882	16	260	15	799
1887	13	441	18	763
1892	12	428	22	842
1897	13	407	23	832
1902	16	619	31	958
1907-08	*35	428	*38	979(1907)
1912-13	*69	986	*38	914(1912)
1917-18	*78	1,514	*43	938(1917)
1920-21	*81	1,328	*42	888(1920)
1921-22	*82	1,481	*44	1,000(1921)

* Including those engaged in both a Normal and a Normal Model School.

2. High School Entrance Examinations, 1877-1921

Year	Total number examined	Number granted certificates	Percentage	Year	Total number examined and recommended by Principals	Number granted certificates	Percentage
1877	7,383	3,836	51.95	1907	22,144	15,430	69.68
1882	9,607	4,371	45.49	1912	22,679	13,977	61.62
1887	16,248	9,364	57.63	1917	21,975	15,751	71.67
1892	16,409	8,427	51.35	1919	24,248	18,552	76.50
1897	16,384	10,502	64.09	1920	27,916	22,051	78.99
1902	18,087	13,300	73.53	1921	31,521	25,260	80.13

3. Departmental Academic and Matriculation Examinations, 1921

Examinations	Total Number of Candidates	Number Passed	Number Passed on Appeal	Total Number Passed	Percentage	Number Granted Credit on Papers	Number Granted Credit on Papers on Appeal	Total Number Granted Credit on Papers	Percentage
Senior Public School Graduation	91	49	0	49	53.84	39	2	41	45.05
Senior High School Entrance	65	34	0	34	52.30	29	2	31	47.69
Model Entrance (June)	60	32	0	32	53.33	26	1	27	45.00
English-French Model Entrance (June)	112	86	0	86	76.78	23	1	24	21.42
Model Entrance (August)	103	64	0	64	62.13	37	0	37	35.92
English-French Model Entrance (August)	15	9	0	9	60.00	5	0	5	33.33
Lower School	5,517	3,520	8	3,528	63.94	1,856	38	1,894	34.33
Middle School (June)	5,349	3,385	2	3,387	63.32	1,903	29	1,932	36.11
Middle School (September)	993	134	1	135	13.59	539	8	547	55.08
Upper School, Part I (June)	413	240	1	241	58.35	168	4	172	41.64
Upper School, Part II (June)	221	125	0	125	56.56	95	1	96	43.43
Upper School, Parts I and II (September)	383	11	0	11	2.87	324	2	326	85.11
Pass Junior Matriculation (June)	5,852	3,893	12	*3,905	66.72	1,818	60	1,878	32.09
Pass Junior Matriculation (September)	1,119	142	1	*143	12.77	636	13	649	57.99
Totals	20,293	11,724	25	11,749	57.89	7,498	161	7,659	37.74

Number of Honour Matriculation Candidates (June) 1,069
Number of Honour Matriculation Candidates (September) 377
Number of Scholarship Matriculation Candidates (June) 146

*Obtained either complete or partial Junior Matriculation.

THE PUBLIC SCHOOLS

I. TABLE A—SCHOOL ATTENDANCE

Rural Schools	Pupils under 5 years of age	Pupils between 5 and 21 years of age	Pupils over 21 years of age	Total number of pupils attending school	Boys	Girls	Average daily attendance of pupils	Percentage of average to total attendance
1 Brant	3	3,187	....	3,190	1,652	1,538	2,035	64
2 Bruce	....	5,059	....	5,059	2,646	2,413	3,079	61
3 Carleton	11	5,769	....	5,780	2,875	2,905	3,371	58
4 Dufferin	....	2,289	....	2,289	1,219	1,070	1,358	59
5 Dundas	....	2,513	....	2,513	1,330	1,183	1,494	59
6 Elgin	5	4,090	....	4,095	2,109	1,986	2,540	62
7 Essex	....	5,532	....	5,532	2,912	2,620	3,165	57
8 Frontenac	15	4,023	1	4,039	2,030	2,009	2,016	50
9 Glengarry	....	2,788	....	2,788	1,434	1,354	1,450	52
10 Grey	26	6,430	....	6,456	3,365	3,091	3,769	58
11 Haldimand	....	2,449	....	2,449	1,262	1,187	1,617	66
12 Haliburton	11	1,499	....	1,510	771	739	732	48
13 Halton	....	2,210	....	2,210	1,144	1,066	1,279	58
14 Hastings	3	6,417	....	6,420	3,319	3,101	3,667	57
15 Huron	2	5,709	....	5,711	2,923	2,788	3,638	64
16 Kent	....	6,087	....	6,087	3,062	3,025	3,445	57
17 Lambton	4	4,901	....	4,905	2,592	2,313	3,056	62
18 Lanark	....	2,828	....	2,828	1,418	1,410	1,675	59
19 Leeds and Grenville	19	5,658	....	5,677	2,872	2,805	3,197	56
20 Lennox and Addington	10	2,851	....	2,861	1,477	1,384	1,353	47
21 Lincoln	2	3,546	....	3,548	1,822	1,726	2,010	57
22 Middlesex	1	6,527	....	6,528	3,337	3,191	4,245	65
23 Norfolk	5	3,491	....	3,496	1,798	1,698	2,051	59
24 Northumberland and Durham	6	6,150	....	6,156	3,130	3,026	3,702	60
25 Ontario	2	4,840	....	4,842	2,460	2,382	2,881	60
26 Oxford	2	4,708	....	4,710	2,431	2,279	2,983	63
27 Peel	1	2,833	....	2,834	1,483	1,351	1,529	54
28 Perth	....	4,098	....	4,098	2,182	1,916	2,762	67
29 Peterborough	6	3,163	....	3,169	1,557	1,612	1,776	56
30 Prescott and Russell	14	2,916	....	2,930	1,507	1,423	1,606	55
31 Prince Edward	2	2,135	....	2,137	1,083	1,054	1,199	56
32 Renfrew	10	5,637	....	5,647	2,890	2,757	2,919	52
33 Simcoe	4	8,263	....	8,267	4,197	4,070	4,666	56
34 Stormont	3	2,652	....	2,655	1,363	1,292	1,524	57
35 Victoria	....	3,069	....	3,069	1,594	1,475	1,919	62
36 Waterloo	3	3,780	....	3,783	1,967	1,816	2,448	65
37 Welland	....	4,777	....	4,777	2,489	2,288	2,786	58
38 Wellington	5	4,410	....	4,415	2,281	2,134	2,690	61
39 Wentworth	5	5,676	....	5,681	2,839	2,842	3,357	59
40 York	2	17,895	....	17,897	9,113	8,784	10,578	59
41 Algoma	9	2,972	....	2,981	1,492	1,489	1,568	53
42 Kenora	....	637	....	637	338	299	315	49
43 Manitoulin	1	1,720	....	1,721	860	861	940	55
44 Muskoka	3	2,596	....	2,599	1,352	1,247	1,395	54
45 Nipissing	3	1,831	....	1,834	953	881	833	45
46 Parry Sound	4	3,700	1	3,705	1,835	1,870	1,847	50
47 Rainy River	1	1,467	....	1,468	759	709	665	45
48 Sudbury	11	3,603	....	3,614	1,747	1,867	2,185	60
49 Timiskaming, etc	6	3,834	....	3,840	1,949	1,891	1,819	47
50 Thunder Bay	7	2,230	....	2,237	1,116	1,121	1,202	54
Totals	227	207,445	2	207,674	106,336	101,338	120,336	57.94

THE PUBLIC SCHOOLS (Continued)

I. TABLE A—SCHOOL ATTENDANCE (Continued)

Cities	Pupils under 5 years of age	Pupils between 5 and 21 years of age	Pupils over 21 years of age	Total number of pupils attending school	Boys	Girls	Average daily attendance of pupils	Percentage of average to total attendance
1 Belleville	....	1,933	....	1,933	941	992	1,240	64
2 Brantford	....	5,132	....	5,132	2,567	2,565	3,459	67
3 Chatham	....	2,350	....	2,350	1,195	1,155	1,491	63
4 Fort William	....	3,780	....	3,780	1,877	1,903	2,781	74
5 Galt	4	2,417	....	2,421	1,237	1,184	1,747	72
6 Guelph	3	2,765	1	2,769	1,350	1,419	1,880	68
7 Hamilton	....	19,709	....	19,709	9,904	9,805	13,582	69
8 Kingston	92	3,233	....	3,325	1,627	1,698	2,213	67
9 Kitchener	29	3,113	....	3,142	1,624	1,518	2,205	70
10 London	113	9,850	....	9,963	4,983	4,980	6,933	70
11 Niagara Falls	....	2,455	....	2,455	1,234	1,221	1,660	68
12 Ottawa	182	11,708	....	11,890	6,045	5,845	7,929	67
13 Owen Sound	18	2,331	....	2,349	1,197	1,152	1,729	74
14 Peterborough	....	3,346	....	3,346	1,694	1,652	2,539	76
15 Port Arthur	2	3,296	....	3,298	1,644	1,654	2,066	63
16 St. Catharines	....	2,987	....	2,987	1,495	1,492	1,925	64
17 St. Thomas	....	2,788	....	2,788	1,411	1,377	2,146	77
18 Sarnia	....	2,344	....	2,344	1,167	1,177	1,686	72
19 Sault Ste. Marie	36	3,699	....	3,735	1,904	1,831	2,575	69
20 Stratford	....	2,660	....	2,660	1,349	1,311	1,931	73
21 Toronto	50	85,450	2	85,502	42,985	42,517	57,749	68
22 Welland	....	1,874	....	1,874	947	927	1,189	63
23 Windsor	4	4,704	....	4,708	2,355	2,353	3,164	67
24 Woodstock	....	1,525	....	1,525	788	737	1,127	74
Totals	533	185,449	3	185,985	93,520	92,465	126,946	68.25
Towns								
1 Alexandria	....	73	....	73	28	45	45	62
2 Alliston	....	271	....	271	137	134	174	64
3 Almonte	....	329	....	329	170	159	244	74
4 Amherstburg	....	296	....	296	135	161	160	54
5 Arnprior	....	542	....	542	273	269	368	68
6 Aurora	....	487	....	487	246	241	324	67
7 Aylmer	21	474	....	495	273	222	345	70
8 Bala	....	83	....	83	31	52	57	69
9 Barrie	....	1,491	....	1,491	770	721	944	63
10 Blenheim	....	294	....	294	141	153	241	82
11 Blind River	....	154	....	154	69	85	92	60
12 Bonfield	....	41	....	41	18	23	14	34
13 Bothwell	....	118	....	118	63	55	74	63
14 Bowmanville	....	582	....	582	297	285	396	68
15 Bracebridge	....	535	....	535	271	264	407	76
16 Brampton	....	801	....	801	410	391	572	71
17 Bridgeburg	....	413	....	413	226	187	261	63
18 Brockville	....	1,338	....	1,338	689	649	998	75
19 Bruce Mines	1	148	....	149	74	75	109	73
20 Burlington	....	540	....	540	253	287	366	68
21 Cache Bay	....	137	....	137	71	66	87	64
22 Campbellford	....	610	....	610	291	319	389	64
23 Capreol	....	306	....	306	145	161	140	46
24 Carleton Place	....	772	....	772	396	376	524	68
25 Charlton	....	97	....	97	55	42	49	51
26 Chesley	....	373	....	373	187	186	259	69
27 Clinton	....	312	....	312	160	152	287	92
28 Cobalt	....	874	....	874	444	430	552	63
29 Cobourg	....	785	....	785	402	383	546	70
30 Cochrane	....	397	....	397	184	213	212	53
31 Collingwood	....	1,437	....	1,437	689	748	976	68
32 Copper Cliff	30	730	....	760	378	382	576	76
33 Cornwall	....	576	....	576	288	288	426	74
34 Deseronto	....	415	....	415	224	191	264	64

THE PUBLIC SCHOOLS (Continued)

I. TABLE A—SCHOOL ATTENDANCE (Continued)

Towns	Pupils under 5 years of age	Pupils between 5 and 21 years of age	Pupils over 21 years of age.	Total number of pupils attending school	Boys	Girls	Average daily attendance of pupils	Percentage of average to total attendance
35 Dresden	....	245	....	245	124	121	189	77
36 Dryden	....	261	....	261	122	139	154	59
37 Dundas	....	933	....	933	450	483	648	69
38 Dunnville	1	553	....	554	294	260	355	64
39 Durham	....	271	....	271	132	139	228	84
40 Eastview	....	437	....	437	222	215	260	59
41 Englehart	....	214	....	214	103	111	118	55
42 Essex	....	320	....	320	162	158	223	70
43 Ford	....	363	....	363	182	181	176	48
44 Forest	....	254	....	254	124	130	171	67
45 Fort Frances	....	484	....	484	230	254	312	64
46 Gananoque	....	735	....	735	369	366	509	69
47 Goderich	....	683	....	683	334	349	434	64
48 Gore Bay	....	161	....	161	79	82	116	72
49 Gravenhurst	....	383	....	383	182	201	252	66
50 Haileybury	....	605	....	605	325	280	379	63
51 Hanover	....	511	....	511	253	258	357	70
52 Harriston	....	252	....	252	123	129	165	65
53 Hawkesbury	....	192	....	192	93	99	111	58
54 Hespeler	....	608	....	608	298	310	405	67
55 Huntsville	....	542	....	542	266	276	354	65
56 Ingersoll	....	976	....	976	508	468	635	65
57 Iroquois Falls	....	406	....	406	204	202	209	51
58 Kearney	....	108	....	108	54	54	71	66
59 Keewatin	....	265	....	265	130	135	205	77
60 Kenora	....	1,009	....	1,009	522	487	720	71
61 Kincardine	1	291	....	292	162	130	245	84
62 Kingsville	....	436	....	436	226	210	312	72
63 Latchford	....	90	....	90	48	42	27	30
64 Leamington	....	699	....	699	333	366	483	69
65*Leaside	....	47	....	47	24	23	12	26
66 Lindsay	....	1,217	....	1,217	628	589	901	74
67 Listowel	....	372	....	372	189	183	292	78
68 Little Current	....	222	....	222	101	121	138	62
69 Massey	....	135	....	135	70	65	87	64
70 Matheson	....	149	....	149	81	68	59	40
71 Mattawa	....	49	....	49	23	26	25	51
72 Meaford	....	514	....	514	256	258	358	70
73 Merritton	....	291	....	291	133	158	207	71
74 Midland	....	1,597	....	1,597	783	814	1,064	67
75 Milton	....	433	....	433	218	215	301	70
76 Mimico	....	813	....	813	369	444	520	64
77 Mitchell	....	287	....	287	149	138	198	69
78 Mount Forest	....	246	....	246	126	120	172	70
79 Napanee	....	558	....	558	277	281	363	65
80 New Liskeard	....	524	....	524	221	303	333	64
81 Newmarket	....	722	....	722	350	372	514	71
82 New Toronto	....	507	....	507	241	266	349	69
83 Niagara	....	225	....	225	113	112	147	65
84 North Bay	....	1,443	....	1,443	743	700	996	69
85 Oakville	....	613	....	613	318	295	372	61
86 Orangeville	....	402	....	402	196	206	277	69
87 Orillia	....	1,434	....	1,434	717	717	1,013	71
88 Oshawa	....	2,132	....	2,132	1,078	1,054	1,358	64
89 Palmerston	....	308	....	308	151	157	200	65
90 Paris	....	736	....	736	360	376	544	74
91 Parkhill	....	147	....	147	81	66	97	66
92 Parry Sound	....	1,013	....	1,013	510	503	691	68
93 Pembroke	13	960	....	973	518	455	660	68
94†Penetanguishene	....	970	....	970	478	492	627	65

* Opened Sept. 1st. † Including Protestant Separate School

THE PUBLIC SCHOOLS (Continued)

I. TABLE A—SCHOOL ATTENDANCE (Concluded)

Towns—Concluded	Pupils under 5 years of age	Pupils between 5 and 21 years of age	Pupils over 21 years of age	Total number of pupils attending school	Boys	Girls	Average daily attendance of pupils	Percentage of average to total attendance
95 Perth	....	454	....	454	216	238	355	78
96 Petrolia	....	573	....	573	291	282	419	73
97 Picton	2	466	....	468	236	232	325	69
98 Port Colborne	....	755	....	755	409	346	480	64
99 Port Hope	....	825	....	825	398	427	592	72
100 Powassan	....	159	....	159	68	91	90	57
101 Prescott	9	369	....	378	190	188	237	63
102 Preston	....	867	....	867	430	437	622	72
103 Rainy River	....	374	....	374	205	169	239	64
104 Renfrew	2	555	....	557	281	276	366	66
105 Ridgetown	....	346	....	346	155	191	234	68
106 Rockland	....	69	....	69	46	23	44	64
107 St. Mary's	....	614	....	614	319	295	390	64
108 Sandwich	....	506	....	506	246	260	277	55
109 Seaforth	....	269	....	269	111	158	170	63
110 Simcoe	....	728	....	728	381	347	499	69
111 Sioux Lookout	....	195	....	195	97	98	112	57
112 Smith's Falls	....	1,155	....	1,155	604	551	827	72
113 Southampton	....	391	....	391	208	183	242	62
114 Stayner	....	190	....	190	99	91	133	70
115 Strathroy	....	428	....	428	222	206	310	72
116 Sturgeon Falls	....	235	....	235	120	115	127	54
117 Sudbury	....	1,059	....	1,059	504	555	729	69
118 Thessalon	....	421	....	421	198	223	267	63
119 Thornbury	....	175	....	175	90	85	111	63
120 Thorold	....	674	....	674	340	334	337	50
121 Tilbury	....	181	....	181	92	89	107	59
122 Tillsonburg	6	622	....	628	326	302	396	63
123 Timmins	....	378	....	378	192	186	236	62
124 Trenton	1	1,154	....	1,155	590	565	677	59
125 Trout Creek	....	85	....	85	47	38	65	76
126 Uxbridge	....	205	....	205	98	107	165	80
127 Vankleek Hill	....	125	....	125	65	60	94	75
128 Walkerton	....	261	....	261	128	133	172	66
129 Walkerville	....	1,290	....	1,290	668	622	830	64
130 Wallaceburg	....	722	....	722	362	360	417	58
131 Waterloo	....	853	....	853	416	437	601	70
132 Webbwood	....	181	....	181	105	76	84	46
133 Weston	....	761	....	761	390	371	477	62
134 Whitby	....	425	....	425	237	188	308	72
135 Wiarton	....	406	....	406	204	202	257	63
136 Wingham	....	403	....	403	186	217	296	73
Totals	87	70,088	....	70,175	35,214	34,961	46,892	66.82
Totals								
1 Rural Schools	227	207,445	2	207,674	106,336	101,338	120,336	57.94
2 Cities	533	185,449	3	185,985	93,520	92,465	126,946	68.25
3 Towns	87	70,088	....	70,175	35,214	34,961	46,892	66.82
4 Villages	7	24,250	....	24,257	12,083	12,174	15,855	65.36
5 Grand Totals, 1920	854	487,232	5	488,091	247,153	240,938	310,029	63.52
6 Grand Totals, 1919	1012	470,702	15	471,729	238,496	233,233	308,708	65.44
7 Increases	....	16,530	....	16,362	8,657	7,705	1,321	.....
8 Decreases	158	.....	10	.....	.....	.....	.....	1.92
9 Percentages	.17	99.82	....	.....	50.63	49.36	63.52	.....

THE PUBLIC

II. TABLE B—NUMBER OF PUPILS IN THE

Rural Schools	Kindergarten-Primary	Primer	1st Book	2nd Book	3rd Book	4th Book
1 Brant	43	631	387	645	716	718
2 Bruce	.....	1,092	748	974	1,123	1,078
3 Carleton	77	1,482	755	1,157	1,112	1,163
4 Dufferin	6	530	273	421	479	552
5 Dundas	.....	644	271	492	512	574
6 Elgin	.....	841	475	659	992	1,087
7 Essex	40	1,454	907	1,208	1,085	820
8 Frontenac	.....	1,179	550	693	764	851
9 Glengarry	2	797	378	633	502	459
10 Grey	.....	1,489	751	1,223	1,457	1,464
11 Haldimand	.....	551	288	458	522	612
12 Haliburton	33	479	173	324	265	224
13 Halton	.....	511	298	426	444	518
14 Hastings	.....	1,719	928	1,280	1,243	1,207
15 Huron	6	1,010	692	1,179	1,316	1,295
16 Kent	17	1,649	801	1,201	1,163	1,183
17 Lambton	3	944	661	851	1,062	1,273
18 Lanark	1	689	404	482	603	621
19 Leeds and Grenville	.....	1,356	734	973	1,147	1,412
20 Lennox and Addington	13	731	374	506	593	625
21 Lincoln	27	907	456	639	813	667
22 Middlesex	.....	1,270	839	1,414	1,400	1,553
23 Norfolk	.....	819	471	803	742	627
24 Northumberland and Durham	9	1,373	767	1,303	1,338	1,264
25 Ontario	.....	1,245	559	951	1,031	1,019
26 Oxford	.....	992	602	817	1,203	1,027
27 Peel	.....	701	301	575	601	638
28 Perth	.....	720	549	679	1,059	1,016
29 Peterborough	.....	938	425	613	604	572
30 Prescott and Russell	40	939	400	498	450	555
31 Prince Edward	6	516	289	351	490	459
32 Renfrew	.....	1,743	768	1,023	1,068	949
33 Simcoe	.....	2,119	1,045	1,826	1,669	1,564
34 Stormont	.....	727	300	531	534	557
35 Victoria	.....	662	420	589	621	684
36 Waterloo	.....	834	459	828	884	753
37 Welland	127	1,215	625	864	1,065	840
38 Wellington	4	954	508	767	952	1,143
39 Wentworth	113	1,351	756	1,021	1,249	1,149
40 York	134	5,164	3,005	3,902	3,457	2,167
41 Algoma	10	962	358	538	580	508
42 Kenora	12	207	108	111	107	90
43 Manitoulin	.....	532	179	330	339	331
44 Muskoka	3	716	349	454	521	514
45 Nipissing	225	654	266	304	240	144
46 Parry Sound	.....	1,177	483	701	686	561
47 Rainy River	.....	479	199	270	258	233
48 Sudbury	233	1,532	499	517	434	360
49 Timiskaming, etc	51	1,493	530	633	599	518
50 Thunder Bay	75	805	349	390	339	253
Totals	1,310	53,524	27,712	40,027	42,433	40,451

SCHOOLS (Continued)

VARIOUS BRANCHES OF INSTRUCTION

	Beyond 4th Book	Art	Geography	Music	Literature	Composition	Grammar	English History
1	50	2,644	2,604	2,735	2,851	2,729	842	1,566
2	44	4,727	3,842	3,048	4,242	4,077	1,321	1,530
3	34	5,582	4,563	4,158	4,747	5,017	1,314	2,246
4	28	2,130	1,649	1,382	1,872	1,844	639	775
5	20	2,488	1,846	1,350	1,925	2,023	705	939
6	41	4,025	3,238	3,683	3,930	3,924	1,139	2,505
7	18	5,341	3,550	4,298	4,908	4,965	1,877	1,423
8	2	4,039	2,834	3,163	4,039	4,039	843	1,652
9	17	2,595	1,980	1,925	2,328	2,315	659	926
10	72	6,114	4,949	4,013	5,281	5,176	1,781	2,420
11	18	2,328	1,990	2,153	2,088	2,096	868	1,017
12	12	1,368	944	789	1,145	1,031	330	406
13	13	2,113	1,683	1,366	1,900	1,816	731	657
14	43	6,183	5,393	5,535	6,000	5,980	1,377	2,053
15	213	5,194	4,405	3,937	4,724	4,484	1,818	2,097
16	73	5,843	4,233	3,941	4,878	4,687	1,530	2,174
17	111	4,626	3,825	3,016	4,435	4,600	1,400	2,812
18	28	2,757	2,278	1,774	2,470	2,422	687	913
19	55	5,608	4,089	3,028	4,572	4,585	1,598	2,141
20	19	2,772	2,169	1,995	2,510	2,521	889	1,128
21	39	3,353	2,685	3,045	2,944	2,958	826	1,129
22	52	6,482	5,124	5,122	5,712	5,844	2,017	2,629
23	34	3,441	2,777	2,509	2,996	3,160	665	1,335
24	102	5,739	4,479	4,025	4,864	4,875	1,729	1,900
25	37	3,968	3,397	3,900	3,581	3,569	1,124	1,935
26	69	4,683	3,759	2,860	4,133	4,167	1,234	1,905
27	18	2,678	2,171	1,960	2,518	2,408	730	911
28	75	3,994	3,645	3,799	3,766	3,740	1,527	1,437
29	17	2,963	2,184	2,106	2,441	2,502	718	984
30	48	2,801	1,917	2,183	2,146	2,316	714	1,081
31	26	2,074	1,741	1,550	1,910	1,937	592	932
32	96	5,508	5,020	4,474	5,174	5,220	1,064	2,623
33	44	8,207	7,085	4,342	7,400	6,699	1,894	3,043
34	6	2,478	2,095	1,734	2,226	2,301	915	1,191
35	93	2,979	2,423	1,732	2,740	2,648	818	1,208
36	25	3,783	3,362	3,324	3,783	3,783	872	964
37	41	4,599	3,324	4,046	3,404	3,476	1,119	1,334
38	87	4,192	3,247	3,513	3,469	3,399	1,805	1,638
39	42	5,567	4,559	5,487	5,093	4,784	1,226	2,289
40	68	17,777	15,415	17,065	16,042	15,737	3,229	4,813
41	25	2,913	1,937	2,204	2,119	2,080	594	842
42	2	533	342	439	412	373	167	168
43	10	1,707	1,085	1,488	1,094	1,092	361	532
44	42	2,523	1,763	1,443	2,201	2,172	921	897
45	1	1,738	1,073	1,440	1,595	1,522	191	436
46	97	3,580	2,404	2,901	3,782	3,313	798	969
47	29	1,347	971	941	990	1,095	325	430
48	39	3,362	2,539	2,304	2,592	2,658	571	851
49	16	3,596	2,906	3,235	3,103	2,947	822	1,116
50	26	1,364	1,275	1,931	2,179	2,172	610	514
	2,217	198,406	158,768	154,391	177,254	175,278	52,526	73,416

THE PUBLIC

II. TABLE B—NUMBER OF PUPILS IN THE

Rural Schools	Canadian History	Physiology and Hygiene	Nature Study	Physical Culture	Bookkeeping	Arithmetic and Mensuration
1 Brant	1,558	2,537	2,893	2,903	22	25
2 Bruce	2,043	3,801	4,098	4,438	83	17
3 Carleton	2,933	4,548	5,249	5,722	1	2
4 Dufferin	887	1,745	1,918	2,153	26	16
5 Dundas	1,080	576	858	2,513	8	20
6 Elgin	2,551	3,951	3,962	4,034	31	32
7 Essex	2,015	5,124	5,239	5,445	.....	.....
8 Frontenac	1,784	4,039	4,039	4,039	.....	.....
9 Glengarry	1,105	1,792	2,016	2,616	.....	7
10 Grey	2,812	5,030	5,630	6,237	29	26
11 Haldimand	1,206	2,045	2,223	2,423	6	8
12 Haliburton	532	823	1,250	1,200	7	11
13 Halton	909	1,758	1,827	2,111	2	9
14 Hastings	2,458	5,926	6,029	6,337	19	38
15 Huron	2,659	4,185	4,327	5,243	170	185
16 Kent	2,609	4,281	4,608	5,896	34	22
17 Lambton	2,910	4,286	4,043	4,804	46	99
18 Lanark	1,187	2,094	2,475	2,780	1	1
19 Leeds and Grenville	2,648	4,604	4,921	5,312	4	31
20 Lennox and Addington	1,223	2,227	2,410	2,725	1	7
21 Lincoln	1,266	2,582	3,106	3,433	13	30
22 Middlesex	2,782	5,235	5,442	6,491	99	69
23 Norfolk	1,486	2,984	3,157	3,484	21	22
24 Northumberland and Durham	2,445	4,564	5,163	5,870	65	65
25 Ontario	2,106	3,573	4,585	4,748	34	37
26 Oxford	2,204	4,274	4,479	4,710	40	54
27 Peel	1,054	2,265	2,418	2,773	4	6
28 Perth	2,004	3,673	3,881	4,085	25	33
29 Peterborough	1,196	2,500	2,697	2,643	3	8
30 Prescott and Russell	1,278	2,067	2,228	2,721	43	45
31 Prince Edward	987	1,876	1,979	2,131	9	15
32 Renfrew	2,880	5,104	5,277	5,535	70	72
33 Simcoe	3,763	6,796	7,345	7,488	24	25
34 Stormont	1,281	1,858	1,948	2,604	.....	2
35 Victoria	1,279	2,528	2,775	2,689	39	58
36 Waterloo	1,265	3,541	3,626	3,621	19	26
37 Welland	1,754	3,217	3,747	4,585	10	32
38 Wellington	2,098	3,515	3,813	4,148	28	54
39 Wentworth	2,762	4,713	5,082	5,483	30	39
40 York	5,517	15,974	16,673	17,828	51	60
41 Algoma	1,159	2,762	2,767	2,740	20	21
42 Kenora	215	367	464	536	.....	2
43 Manitoulin	664	1,706	1,702	1,707	.....	10
44 Muskoka	1,119	1,739	2,248	2,144	53	35
45 Nipissing	771	1,381	1,570	1,602	639	2
46 Parry Sound	1,349	3,271	3,414	3,436	84	116
47 Rainy River	624	1,080	1,177	1,268	26	26
48 Sudbury	1,343	2,955	3,167	3,456	37	39
49 Timiskaming, etc	1,501	3,083	3,436	3,492	60	12
50 Thunder Bay	688	2,193	2,178	2,144	20	20
Totals	87,949	168,748	181,559	198,526	2,056	1,591

SCHOOLS (Continued)

VARIOUS BRANCHES OF INSTRUCTION (Continued)

	Algebra	Geometry	Latin	French (beyond 4th Book.)	French (Primer to 4th Book, Incl.)	Elementary Science	Commercial Subjects	Agriculture	Manual Training	Household Science
1	25	1	17	.....	.....	17	.....	310	43	98
2	10	5	7	2	3	2	3	1,654	429	281
3	2	.....	1	1	.....	.....	.....	862	712	201
4	15	13	12	6	.....	1	.....	710	357	63
5	20	7	8	7	.....	20	3	1,278	.....	40
6	14	.....	.....	.....	.....	23	8	1,820	1,240	1,273
7	.....	.....	.....	.....	707	2	.....	947	232	111
8	.....	.....	.....	.....	.....	.....	.....	73	.....	.....
9	7	.....	7	6	65	5	.....	1,293	302	45
10	25	9	8	.....	7	21	12	658	330	38
11	8	.....	3	.....	.....	15	14	450	182	5
12	10	5	1	.....	.....	9	2	12	32	79
13	9	3	2	.....	2	5	.....	502	241	38
14	38	12	13	6	1	11	.....	1,394	1,376	330
15	173	55	59	.....	7	157	56	1,954	182	21
16	22	10	7	2	206	17	.....	3,039	793	81
17	71	42	23	51	5	85	32	1,568	699	64
18	.....	.....	4	4	.....	1	.....	1,128	98	18
19	30	15	14	20	14	24	.....	1,301	51	152
20	6	.....	4	.....	.....	3	.....	16	.....	.....
21	28	5	5	6	.....	16	16	622	107	227
22	30	5	4	.....	.....	11	3	2,330	2,193	333
23	18	1	9	8	1	6	.....	553	230	38
24	64	36	25	3	25	17	13	1,734	228	108
25	34	8	7	7	.....	32	15	838	.....	.....
26	53	.....	24	14	8	30	1	1,375	239	26
27	6	.....	4	.....	4	.....	15	937	239	105
29	33	2	24	10	.....	23	.....	2,070	285	190
29	6	1	1	1	.....	1	.....	183	.....	43
30	43	8	37	29	866	27	13	323	258	53
31	13	3	5	3	.....	6	1	430	1,515	68
32	74	13	37	37	.....	58	.....	391	.....	.....
33	17	3	.....	.....	130	12	7	1,513	448	58
34	2	.....	1	.....	.....	1	.....	948	38	19
35	47	.....	.....	.....	2	8	10	20	40	.....
36	21	10	19	3	9	6	6	633	206	15
37	26	16	14	17	.....	18	1	721	114	144
38	42	19	33	13	.....	19	2	1,145	314	144
39	38	2	26	9	15	19	23	2,178	597	944
40	60	1	.....	.....	.....	57	.....	3,278	1,385	920
41	21	9	2	2	.....	21	14	481	151	87
42	2	1	2	1	1	1	.....	20	.....	35
43	10	6	5	3	.....	10	.....	55	.....	.....
44	25	6	8	.....	7	25	.....	44	106	6
45	2	.....	1	.....	163	1	1	107	134	55
46	82	49	11	12	1	69	11	119	154	41
47	24	4	18	18	.....	25	.....	100	205	36
48	35	9	21	1	792	29	33	43	84	.....
49	12	2	4	.....	.....	6	1	242	418	40
50	20	20	.....	.....	.....	20	.....	46	14	.....
	1,373	416	537	302	3,041	992	316	44,448	17,001	6,673

THE PUBLIC

II. TABLE B—NUMBER OF PUPILS IN THE

Cities	Kindergarten	Kindergarten-Primary	Primer	1st Book	2nd Book	3rd Book	4th Book
1 Belleville	.....	253	285	298	358	399	340
2 Brantford	.....	639	1,152	785	821	1,094	641
3 Chatham	227	204	282	264	421	543	409
4 Fort William	394	.....	882	564	597	743	600
5 Galt	.....	210	522	233	498	508	450
6 Guelph	187	167	450	324	485	595	406
7 Hamilton	1,648	30	3,433	2,722	4,603	4,102	2,928
8 Kingston	139	141	838	408	445	687	667
9 Kitchener	159	108	530	412	703	725	505
10 London	876	64	1,524	1,154	2,205	2,012	2,092
11 Niagara Falls	.....	.....	727	336	459	528	405
12 Ottawa	1,361	.....	1,909	1,483	1,527	2,555	2,494
13 Owen Sound	254	.....	406	247	510	480	452
14 Peterborough	203	270	628	454	554	619	618
15 Port Arthur	136	138	750	464	770	500	540
16 St. Catharines	.....	278	527	498	467	686	531
17 St. Thomas	.....	244	565	365	412	613	589
18 Sarnia	.....	.....	471	371	440	494	568
19 Sault Ste. Marie	395	53	802	523	523	720	719
20 Stratford	24	233	410	327	321	649	696
21 Toronto	9,625	.....	15,543	9,634	16,288	17,969	15,977
22 Welland	136	.....	507	239	346	407	239
23 Windsor	.....	822	508	579	875	1,133	791
24 Woodstock	.....	.....	361	277	241	358	288
Totals	15,764	3,854	34,042	22,961	34,869	39,119	33,945
Towns							
1 Alexandria	.....	.....	22	11	10	17	13
2 Alliston	.....	.....	85	47	50	49	40
3 Almonte	.....	.....	59	74	78	69	49
4 Amherstburg	.....	.....	89	84	55	30	38
5 Arnprior	.....	.....	85	86	90	123	158
6 Aurora	.....	.....	109	60	96	138	84
7 Aylmer	25	40	59	57	85	94	135
8 Bala	.....	.....	21	11	6	23	14
9 Barrie	.....	140	331	206	302	253	259
10 Blenheim	.....	.....	76	46	40	40	92
11 Blind River	.....	.....	41	25	27	34	27
12 Bonfield	.....	.....	18	7	1	11	4
13 Bothwell	.....	.....	33	11	15	29	30
14 Bowmanville	.....	.....	130	102	143	103	104
15 Bracebridge	.....	.....	170	68	106	112	79
16 Brampton	.....	.....	166	141	189	164	141
17 Bridgeburg	.....	91	56	40	55	74	97
18 Brockville	.....	.....	354	192	168	310	314
19 Bruce Mines	.....	14	41	16	21	37	20
20 Burlington	.....	87	69	102	94	94	94
21 Cache Bay	.....	.....	35	20	21	30	31
22 Campbellford	.....	.....	128	94	120	127	141
23 Capreol	.....	.....	149	42	57	39	19
24 Carleton Place	.....	.....	254	94	108	191	125
25 Charlton	.....	.....	28	5	32	18	12
26 Chesley	.....	.....	71	48	87	76	91
27 Clinton	.....	.....	51	49	50	77	85
28 Cobalt	.....	.....	230	125	175	164	180
29 Cobourg	44	46	133	124	147	145	146
30 Cochrane	....		122	69	99	54	53
31 Collingwood	117	.....	307	197	263	292	261

SCHOOLS (Continued)

VARIOUS BRANCHES OF INSTRUCTION (Continued)

	d 4th Book	Art	Geography	Music	Literature	Composition	Grammar	English History	Canadian History
1	.....	1,933	1,933	1,933	1,933	1,933	340	840	840
2	.....	5,132	5,132	5,132	5,132	5,132	642	767	1,246
3	.....	2,158	1,736	2,350	2,009	2,059	409	952	952
4	.....	3,386	1,940	3,386	3,386	3,386	600	1,558	1,558
5	.....	2,421	2,421	2,421	2,421	2,421	450	450	1,516
6	155	2,386	2,270	2,464	2,453	2,328	857	1,355	1,449
7	243	18,212	16,281	19,709	17,708	17,711	3,611	8,546	11,479
8	.....	3,283	2,443	3,325	3,302	3,302	667	1,028	1,224
9	.....	3,142	3,071	3,142	3,983	3,142	505	2,983	2,983
10	36	9,137	8,786	9,269	8,907	9,087	2,238	4,055	5,407
11	.....	2,127	1,728	2,455	2,127	2,127	785	609	956
12	561	10,529	10,529	11,890	10,529	10,529	3,007	4,923	5,319
13	.....	2,152	1,622	2,198	1,941	1,519	452	467	791
14	.....	3,346	2,873	3,346	3,346	3,346	1,237	1,791	1,791
15	.....	3,024	2,274	3,024	2,274	2,274	540	1,040	1,040
16	.....	2,609	2,082	1,584	1,584	2,609	531	1,217	1,217
17	.....	2,746	2,304	2,674	2,536	2,344	629	686	820
18	.....	2,344	2,275	2,344	2,275	2,275	568	1,899	1,899
19	.....	3,366	2,682	3,477	3,167	3,184	844	956	1,300
20	.....	2,660	2,543	2,660	2,543	2,580	778	622	1,162
21	466	74,673	70,411	71,026	74,371	74,417	23,459	26,769	37,699
22	.....	1,738	1,231	1,874	1,738	1,738	646	646	646
23	.....	4,708	4,708	4,708	4,708	4,708	1,866	2,769	2,769
24	.....	1,525	887	1,525	887	1,084	288	646	887
	1,461	168,737	154,162	167,916	165,260	165,230	45,949	67,574	86,950
1	.....	73	51	73	51	51	13	30	30
2	.....	271	186	271	271	271	89	57	52
3	.....	329	329	329	329	329	49	329	329
4	.....	296	207	.....	296	296	68	38	68
5	.....	542	392	343	447	447	158	277	315
	.....	487	378	487	378	487	84	84	138
7	.....	470	371	470	470	470	229	314	314
8	8	83	62	83	83	83	22	62	62
9	.....	1,351	1,351	1,491	814	814	418	418	462
10	.....	294	218	214	294	294	92	156	36
11	.....	154	154	154	154	154	27	27	154
12	.....	23	23	41	41	23	4	15	15
13	.....	118	74	.....	74	74	39	59	92
14	.....	582	420	582	582	582	207	170	104
15	.....	535	297	.....	365	365	120	191	191
16	.....	801	615	801	801	801	141	84	141
17	.....	413	226	413	226	413	226	226	226
18	.....	1,338	1,338	1,338	1,338	1,338	314	792	792
19	.....	149	94	149	149	149	20	20	57
20	.....	479	371	304	479	435	94	167	146
21	.....	137	137	137	137	137	31	61	61
22	.....	610	610	.....	610	610	141	141	388
23	.....	306	157	306	157	157	19	115	115
24	.....	518	772	518	518	518	125	125	316
25	2	97	90	40	97	97	14	45	90
26	.....	373	309	325	309	373	91	267	239
27	.....	312	312	312	312	312	85	312	312
28	.....	874	874	874	874	874	180	135	563
29	.....	695	562	695	695	695	146	291	291
30	.....	397	275	397	397	397	53	275	275
31	.....	1,263	910	953	1,014	971	352	439	476

THE PUBLIC

II. TABLE B—NUMBER OF PUPILS IN THE

Cities	Physiology and Hygiene	Nature Study	Physical Culture	Bookkeeping	Arithmetic and Mensuration	Algebra
1 Belleville	1,933	1,933	1,933	.....	.....	.....
2 Brantford	5,132	5,132	5,132	.....	.....	.....
3 Chatham	1,755	2,009	2,052	.....	.....	.....
4 Fort William	3,386	3,386	3,386	.....	.....	.....
5 Galt	2,421	2,421	2,421	.....	.....	.....
6 Guelph	2,201	2,214	2,489	155	152	.....
7 Hamilton	17,847	18,299	19,700	243	243	243
8 Kingston	3,189	3,325	3,325	.....	.....	.....
9 Kitchener	3,142	3,142	3,142	.....	.....	.....
10 London	9,062	9,135	9,231	.....	36	36
11 Niagara Falls	956	2,127	2,455	.....	.....	.....
12 Ottawa	10,529	10,529	10,529	222	561	.....
13 Owen Sound	1,802	2,152	2,152	.....	.....	.....
14 Peterborough	3,346	3,346	3,346	.....	.....	.....
15 Port Arthur	3,024	3,024	3,298	.....	.....	.....
16 St. Catharines	1,217	2,609	2,987	.....	.....	.....
17 St. Thomas	2,746	2,667	2,661	.....	.....	.....
18 Sarnia	2,344	2,344	2,344	.....	.....	.....
19 Sault Ste. Marie	3,225	3,439	3,439	.....	.....	.....
20 Stratford	2,660	2,576	2,660	.....	.....	.....
21 Toronto	73,903	76,394	76,671	466	2	408
22 Welland	1,179	1,874	1,879	.....	.....	.....
23 Windsor	4,708	4,708	4,708	.....	.....	.....
24 Woodstock	1,525	1,525	1,525	.....	.....	.....
Totals	163,232	170,310	173,465	1,086	994	687
Towns						
1 Alexandria	40	40	73	.....	.....	.....
2 Alliston	271	271	271	.....	.....	.....
3 Almonte	329	329	329	.....	.....	.....
4 Amherstburg	296	296	296	.....	.....	.....
5 Arnprior	542	542	542	.....	.....	.....
6 Aurora	487	487	487	.....	.....	.....
7 Aylmer	495	495	495	.....	.....	.....
8 Bala	83	83	83	8	8	5
9 Barrie	814	1,351	1,491	.....	.....	.....
10 Blenheim	220	294	294	.....	.....	.....
11 Blind River	154	154	154	.....	.....	.....
12 Bonfield	41	41	41	.....	.....	.....
13 Bothwell	74	74	77	.....	.....	.....
14 Bowmanville	582	582	582	.....	.....	.....
15 Bracebridge	297	535	535	.....	.....	.....
16 Brampton	801	801	801	.....	.....	.....
17 Bridgeburg	413	413	413	.....	.....	.....
18 Brockville	1,338	1,338	1,338	.....	.....	.....
19 Bruce Mines	149	149	149	.....	.....	.....
20 Burlington	479	435	479	.....	.....	.....
21 Cache Bay	137	137	137	.....	.....	.....
22 Campbellford	610	610	610	.....	.....	.....
23 Capreol	306	306	306	.....	.....	.....
24 Carleton Place	316	518	772	.....	.....	.....
25 Charlton	90	97	97	.....	2	2
26 Chesley	373	373	373	.....	.....	.....
27 Clinton	312	312	312	.....	.....	.....
28 Cobalt	874	874	874	.....	.....	.....
29 Cobourg	695	695	562	.....	.....	.....
30 Cochrane	397	397	397	.....	.....	.....
31 Collingwood	927	1,224	1,217	.....	.....	.....

SCHOOLS (Continued)

VARIOUS BRANCHES OF INSTRUCTION (Continued)

	Geometry	Latin	French (beyond 4th Book)	French (Primer to 4th Book, incl.)	Elementary Science	Commercial Subjects	Agriculture	Manual Training	Household Science
1	.....	.....	.....	.....	.....	.....	.....	1,194	188
2	.....	.....	.....	.....	.....	.....	736	736	440
3	.....	.....	.....	.....	.....	.....	.....	1,268	1,067
4	.....	.....	.....	.....	.....	.....	71	418	509
5	.....	.....	.....	.....	.....	.....	183	210	240
6	.....	.....	.....	.....	.....	155	43	692	538
7	136	18	18	.....	18	243	.....	2,504	2,627
8	.....	.....	.....	.....	.....	.....	.....	2,957	507
9	.....	.....	.....	.....	.....	.....	391	2,742	371
10	.....	36	36	.....	36	.....	674	1,790	1,639
11	.....	.....	.....	.....	.....	.....	43	.....	.....
12	.....	.....	.....		325	561	1,758	3,069	3,575
13	.....	.....	.....	.....	.....	.....	163	810	860
14	.....	.....	.....	.....	.....	.....	107	190	198
15	.....	.....	.....	.....	.....	.....	101	248	292
16	.....	.....	.....	.....	.....	.....	.....	.....	.....
17	.....	.....	.....	.....	.....	.....	1,031	901	724
18	.....	.....	.....	.....	.....	.....	.....	362	447
19	.....	.....	.....	.....	.....	.....	381	1,881	1,752
20	.....	.....	.....	.....	.....	.....	657	1,361	762
21	350	.....	.....	.....	115	408	211	67,042	46,236
22	.....	.....	.....	.....	.....	.....	.....	.....	.....
23	.....	.....	.....	.....	.....	.....	63	953	1,053
24	.....	.....	.....	.....	.....	.....	.....	288	288
	486	54	54	.....	494	1,367	6,613	91,616	64,313
1	.....	.....	.....	.....	.....	.....	3	.....	.....
2	.....	.....	.....	.....	.....	.....	.....	.....	.....
3	.....	.....	.....	.....	.....	.....	.....	.....	.....
4	.....	.....	.....	.....	.....	.....	.....	.....	.....
5	.....	.....	.....	.....	.....	.....	.....	.....	.....
6	.....	.....	.....	.....	.....	.....	.....	.....	.....
7	.....	.....	.....	.....	.....	.....	81	116	116
8	.....	.....	.....	.....	8	.....	.....	17	.....
9	.....	.....	.....	.....	.....	.....	.....	.....	.....
10	.....	.....	.....	.....	.....	.....	.....	.....	.....
11	.....	.....	.....	.....	.....	.....	.....	.....	.....
12	.....	.....	.....	.....	.....	.....	6	13	.....
13	.....	.....	.....	.....	.....	.....	.....	.....	.....
14	.....	.....	.....	.....	.....	.....	.....	.....	.....
15	.....	.....	.....	.....	.....	.....	.....	.....	.....
16	.....	.....	.....	.....	.....	.....	.....	.....	.....
17	.....	.....	.....	.....	.....	.....	.....	.....	.....
18	.....	.....	.....	.....	.....	.....	224	302	312
19	.....	.....	.....	.....	.....	.....	149	149	.....
20	.....	.....	.....	.....	.....	.....	.....	240	
21	.....	.....	.....	.....	.....	.....	.....	.....	.....
22	.....	.....	.....	.....	.....	.....	.....	.....	.....
23	.....	.....	.....	.....	.....	.....	.....	.....	.....
24	.....	.....	.....	.....	.....	.....	.....	.....	.....
25	.....	.....	.....	.....	2	.....	.....	.....	.....
26	.....	.....	.....	.....	.....	.....	.....	.....	.....
27	.....	.....	.....	.....	.....	.....	.....	.....	.....
28	.....	.....	.....	.....	.....	.....	.....	874	
29	.....	.....	.....	.....	.....	.....	.....	.....	.....
30	.....	.....	.....	.....	.....	.....	.....	.....	.....
31	.....	.....	.....	.....	.....	.....	.....	296	316

THE PUBLIC

II. TABLE B—NUMBER OF PUPILS IN THE

	Towns	Kindergarten	Kindergarten-Primary	Primer	1st Book	2nd Book	3rd Book	4th Book
32	Copper Cliff	85	.....	194	139	138	132	72
33	Cornwall	.....	.....	132	75	133	120	116
34	Deseronto	.....	.....	98	65	110	84	58
35	Dresden	.....	41	33	44	43	37	47
36	Dryden	.....	.....	49	50	42	59	61
37	Dundas	.....	121	128	115	163	176	230
38	Dunnville	.....	.....	158	101	112	90	93
39	Durham	.....	.....	91	40	62	40	38
40	Eastview	.....	.....	174	76	84	53	50
41	Englehart	.....	73	24	28	35	24	30
42	Essex	.....	49	47	49	47	69	59
43	Ford	.....	88	54	90	44	43	44
44	Forest	.....	.....	42	46	47	57	62
45	Fort Frances	.....	34	71	51	110	104	114
46	Gananoque	.....	.....	162	135	158	158	122
47	Goderich	15	20	111	58	174	132	173
48	Gore Bay	.....	.....	38	12	33	41	37
49	Gravenhurst	.....	.....	110	40	81	90	62
50	Haileybury	.....	.....	152	95	142	133	83
51	Hanover	.....	27	58	59	131	142	94
52	Harriston	.....	.....	38	48	52	45	69
53	Hawkesbury	.....	.....	40	13	32	55	52
54	Hespeler	.....	42	123	60	158	116	109
55	Huntsville	.....	.....	156	89	115	100	82
56	Ingersoll	83	.....	177	145	123	239	209
57	Iroquois Falls	.....	54	142	76	57	23	54
58	Kearney	.....	.....	25	8	18	29	13
59	Keewatin	.....	.....	47	39	45	65	69
60	Kenora	.....	33	253	132	185	190	216
61	Kincardine	.....	.....	58	47	44	72	71
62	Kingsville	.....	40	87	48	79	85	72
63	Latchford	.....	.....	26	14	21	20	9
64	Leamington	.....	.....	186	88	132	155	138
65	Leaside	.....	.....	14	12	8	8	5
66	Lindsay	.....	.....	292	132	276	269	248
67	Listowel	.....	20	67	60	51	91	83
68	Little Current	.....	.....	43	33	49	53	44
69	Massey	.....	.....	32	6	23	24	24
70	Matheson	.....	.....	26	23	27	46	27
71	Mattawa	.....	.....	13	7	5	15	9
72	Meaford	.....	.....	111	61	129	94	119
73	Merritton	.....	32	64	29	51	60	55
74	Midland	.....	.....	408	254	370	315	250
75	Milton	.....	.....	83	67	110	97	76
76	Mimico	.....	.....	193	128	146	159	125
77	Mitchell	.....	.....	49	30	35	84	89
78	Mount Forest	.....	.....	46	30	43	54	73
79	Napanee	.....	.....	151	75	120	97	115
80	New Liskeard	.....	.....	153	75	82	92	122
81	Newmarket	.....	.....	195	90	145	156	136
82	New Toronto	.....	.....	167	63	109	119	49
83	Niagara	.....	.....	50	24	60	46	45
84	North Bay	71	.....	334	189	223	328	298
85	Oakville	.....	.....	136	86	102	151	138
86	Orangeville	.....	.....	79	67	76	87	93
87	Orillia	.....	.....	334	196	337	279	288
88	Oshawa	.....	.....	617	359	353	483	320
89	Palmerston	.....	17	46	44	43	122	36

SCHOOLS (Continued)

VARIOUS BRANCHES OF INSTRUCTION (Continued)

	Beyond 4th Book	Art	Geography	Music	Literature	Composition	Grammar	English History	Canadian History
32	.....	670	481	760	481	481	204	72	204
33	.....	576	576	576	576	576	116	173	222
34	.....	415	252	415	317	415	58	82	98
35	.....	245	204	161	126	245	47	126	47
36	.....	261	212	261	261	61	162	162	162
37	.....	812	569	933	812	812	406	406	406
38	.....	584	396	396	396	396	93	124	59
39	.....	140	180	271	180	180	78	78	78
40	.....	437	268	437	380	380	50	115	168
41	.....	214	141	141	141	141	30	30	30
42	.....	320	320	320	320	271	133	87	133
43	.....	363	275	363	275	275	87	87	87
44	.....	254	212	254	254	254	62	166	166
45	.....	484	484	484	328	484	218	114	218
46	.....	735	573	566	735	735	122	438	438
47	.....	683	542	640	542	566	305	220	305
48	.....	161	161	161	161	161	37	111	111
49	.....	383	361	383	383	350	108	108	256
50	.....	605	453	605	358	453	83	83	340
51	.....	511	483	511	511	483	134	279	314
52	.....	252	214	86	252	252	114	114	114
53	.....	192	192	192	192	192	107	192	192
54	.....	608	608	608	608	608	225	68	225
55	.....	542	375	.....	491	491	82	120	280
56	.....	893	893	976	893	893	209	117	571
57	.....	352	184	406	406	406	54	77	134
58	15	108	108	108	108	108	57	57	108
59	.....	265	218	265	218	265	97	61	115
60	.....	1,009	723	1,009	723	723	216	406	406
61	.....	292	251	292	292	292	71	251	251
62	25	436	261	436	261	261	182	72	85
63	.....	90	58	90	58	52	10	44	50
64	.....	699	659	699	699	699	140	139	156
65	.....	47	33	47	33	33	13	13	13
66	.....	1,217	793	1,217	925	1,217	240	352	517
67	.....	363	216	363	276	276	165	76	74
68	.....	222	222	222	222	222	44	97	97
69	 26	103	103	135	109	135	50	29	64
70	.....	149	123	149	27	73	27	27	27
71	.....	42	29	42	42	42	9	24	24
72	.....	514	393	157	514	514	119	86	119
73	.....	291	291	291	291	291	55	115	156
74	.....	1,597	1,597	1,597	1,316	1,264	250	345	433
75	.....	433	433	433	433	433	173	433	433
76	62	813	620	813	813	813	187	189	198
77	.....	287	208	287	287	287	173	89	173
78	.....	246	246	246	246	246	73	127	127
79	.....	558	407	558	558	558	115	115	115
80	.....	524	524	524	524	524	214	214	524
81	.....	722	437	722	527	722	136	160	187
82	.....	507	340	507	507	409	168	115	102
83	.....	225	225	.....	225	225	91	91	74
84	.....	1,372	860	1,372	1,372	1,372	298	439	298
85	.....	613	613	613	613	613	138	339	391
86	.....	402	402	402	402	402	93	146	216
87	.....	1,434	1,275	1,434	1,434	1,434	288	803	826
88	.....	2,132	1,625	2,132	1,770	1,748	345	628	627
89	.....	308	262	308	308	308	123	123	123

THE PUBLIC

II. TABLE B—NUMBER OF PUPILS IN THE

Towns	Physiology and Hygiene	Nature Study	Physical Culture	Bookkeeping	Arithmetic and Mensuration	Algebra
32 Copper Cliff	481	481	760	.....	.....	.....
33 Cornwall	576	576	576	.....	.....	.....
34 Deseronto	415	415	415	.....	.....	.....
35 Dresden	245	245	245	.....	.....	.....
36 Dryden	261	261	261	.....	.....	.....
37 Dundas	933	406	933	.....	.....	.....
38 Dunnville	554	554	139	.....	.....	.....
39 Durham	180	140	271	.....	.....	.....
40 Eastview	370	370	437	.....	.....	.....
41 Englehart	141	141	214	.....	.....	.....
42 Essex	320	320	320	.....	.....	.....
43 Ford	363	363	363	.....	.....	.....
44 Forest	254	254	254	.....	.....	.....
45 Fort Frances	484	484	484	.....	.....	.....
46 Gananoque	735	735	735	.....	.....	.....
47 Goderich	568	683	683	.....	.....	.....
48 Gore Bay	161	161	161	.....	.....	.....
49 Gravenhurst	350	307	307	.....	.....	.....
50 Haileybury	605	605	605	.....	.....	.....
51 Hanover	483	511	510	.....	.....	.....
52 Harriston	204	252	252	.....	.....	.....
53 Hawkesbury	192	192	192	.....	.....	.....
54 Hespeler	608	499	608	.....	.....	.....
55 Huntsville	343	472	542	.....	.....	.....
56 Ingersoll	893	893	976	117	.....	.....
57 Iroquois Falls	250	352	406	.....	.....	.....
58 Kearney	108	108	108	15	15	15
59 Keewatin	265	265	265	.....	.....	.....
60 Kenora	1,009	1,009	1,009	.....	.....	.....
61 Kincardine	292	292	292	.....	.....	.....
62 Kingsville	384	186	436	.....	25	25
63 Latchford	90	90	90	.....	.....	.....
64 Leamington	699	699	699	.....	.....	.....
65 Leaside	47	47	47	.....	.....	.....
66 Lindsay	1,217	1,217	1,217	.....	.....	.....
67 Listowel	165	363	363	.....	.....	.....
67 Little Current	222	222	222	.....	.....	.....
69 Massey	109	109	135	.....	26	26
70 Matheson	27	73	.....	.....	.....	.....
71 Mattawa	42	42	42	.....	.....	.....
72 Meaford	403	514	514	.....	.....	.....
73 Merritton	291	291	291	.....	.....	.....
74 Midland	1,597	1,597	1,597	.....	.....	.....
75 Milton	433	260	433	.....	.....	.....
76 Mimico	125	751	813	62	62	62
77 Mitchell	287	287	287	.....	.....	.....
78 Mount Forest	246	246	246	.....	.....	.....
79 Napanee	558	558	558	.....	.....	.....
80 New Liskeard	524	524	524	.....	.....	.....
81 Newmarket	722	722	635	.....	.....	.....
82 New Toronto	168	507	507	.....	.....	.....
83 Niagara	225	225	225	.....	.....	.....
84 North Bay	1,372	1,372	1,372	.....	.....	.....
85 Oakville	613	613	613	.....	.....	.....
86 Orangeville	402	402	402	.....	.....	.....
87 Orillia	1,434	1,434	1,434	.....	.....	.....
88 Oshawa	1,918	1,918	2,132	.....	.....	.....
89 Palmerston	308	308	308	.....	.....	.....

SCHOOLS (Continued)

VARIOUS BRANCHES OF INSTRUCTION (Continued)

	Geometry	Latin	French (Beyond 4th Book)	French (Primer to 4th Book, incl.)	Elementar Science	Commercial Subjects	Agriculture	Manual Training	Household Science
32	.....	.....	.....	.....	.....	.....	.....	.....	.....
33	.....	.....	.....	.....	.....	.....	.....	480	96
34	.....	.....	.....	.....	.....	.....	.....	273	.....
35	.....	.....	.....	.....	.....	.....	.....	.....	.....
36	.....	.....	.....	.....	.....	.....	52	.....	.....
37	.....	.....	.....	.....	.....	.....	273	.....	.....
38	.....	.....	.....	.....	.....	.....	.....	.....	.....
39	.....	.....	.....	.....	.....	.....	78	131	.....
40	.....	.....	.....	.....	.....	.....	.....	.....	.....
41	.....	.....	.....	.....	.....	.....	54	.....	.....
42	.....	.....	.....	.....	.....	.....	56	.....	.....
43	.....	.....	.....	.....	.....	.....	.....	.....	.....
44	.....	.....	.....	.....	.....	.....	.....	.....	.....
45	.....	.....	.....	.....	.....	.....	.....	.....	.....
46	.....	.....	.....	.....	.....	.....	.....	.....	.....
47	.....	.....	.....	.....	.....	.....	.....	.....	.....
48	.....	.....	.....	.....	.....	.....	.....	.....	.....
49	.....	.....	.....	.....	.....	.....	.....	.....	.....
50	.....	.....	.....	.....	.....	.....	.....	.....	.....
51	.....	.....	.....	.....	.....	.....	.....	.....	.....
52	.....	.....	.....	.....	.....	.....	.....	.....	.....
53	.....	.....	.....	.....	.....	.....	.....	.....	.....
54	.....	.....	.....	.....	.....	.....	109	.....	.....
55	.....	.....	.....	.....	.....	.....	.....	.....	.....
56	.....	.....	.....	.....	.....	.....	.....	238	210
57	.....	.....	.....	.....	.....	.....	.....	329	.....
58	15	.....	.....	.....	15	15	.....	.....	.....
59	.....	.....	.....	.....	.....	.....	.....	.....	.....
60	.....	.....	.....	.....	.....	.....	.....	.....	.....
61	.....	.....	.....	.....	.....	.....	.....	34	.....
62	.....	25	25	.....	25	.....	25	.....	.....
63	.....	.....	.....	.....	.....	.....	.....	.....	.....
64	.....	.....	.....	.....	.....	.....	.....	.....	.....
65	.....	.....	.....	.....	.....	.....	.....	.....	.....
66	.....	.....	.....	.....	.....	.....	.....	.....	.....
67	.....	.....	.....	.....	.....	.....	165	77	.....
68	.....	.....	.....	.....	.....	.....	.....	.....	.....
69	9	26	26	.....	26	.....	.....	.....	.....
70	.....	.....	.....	.....	.....	.....	.....	.....	.....
71	.....	.....	.....	.....	.....	.....	.....	29	.....
72	.....	.....	.....	.....	.....	.....	.....	.....	.....
73	.....	.....	.....	.....	.....	.....	.....	.....	.....
74	.....	.....	.....	.....	.....	.....	.....	.....	.....
75	.....	.....	.....	.....	.....	.....	173	.....	.....
76	30	53	62	.....	62	62	.....	.....	.....
77	.....	.....	.....	.....	.....	.....	89	287	.....
78	.....	.....	.....	.....	.....	.....	.....	.....	.....
79	.....	.....	.....	.....	.....	.....	.....	.....	.....
80	.....	.....	.....	.....	.....	.....	.....	.....	.....
81	.....	.....	.....	.....	.....	.....	138	.....	.....
82	.....	.....	.....	.....	.....	.....	277	.....	.....
83	.....	.....	.....	.....	.....	.....	.....	.....	.....
84	.....	.....	.....	.....	.....	.....	221	1,372	579
85	.....	.....	.....	.....	.....	.....	102	.....	.....
86	.....	.....	.....	.....	.....	.....	.....	402	134
87	.....	.....	.....	.....	.....	.....	88	.....	.....
88	.....	.....	.....	.....	.....	.....	.....	.....	.....
89	.....	.....	.....	.....	.....	.....	.....	.....	.....

THE PUBLIC

II. TABLE B—NUMBER OF PUPILS IN THE

Towns	Kindergarten	Kindergarten-Primary		1st Book	2nd Book	3rd Book	4th Book
90 Paris	.....	.....	158	90	112	189	187
91 Parkhill	.....	.....	33	23	25	32	34
92 Parry Sound	.....	.....	268	178	165	195	207
93 Pembroke	73	70	175	86	168	227	174
94*Penetanguishene	.....	.....	268	169	212	161	160
95 Perth	.....	.....	97	44	130	102	81
96 Petrolia	.....	.....	144	81	68	138	142
97 Picton	21	27	87	52	90	80	111
98 Port Colborne	.....	.....	240	147	116	133	119
99 Port Hope	.....	.....	228	107	166	148	176
100 Powassan	.....	.....	51	7	24	23	54
101 Prescott	.....	56	52	40	43	83	104
102 Preston	.....	41	176	121	177	192	160
103 Rainy River	.....	.....	144	48	61	55	47
104 Renfrew	.....	.....	103	75	113	120	146
105 Ridgetown	.....	.....	87	47	70	63	79
106 Rockland	.....	.....	17	3	11	14	24
107 St. Mary's	.....	.....	132	101	70	147	164
108 Sandwich	.....	.....	142	73	113	106	72
109 Seaforth	32	.....	65	37	41	56	38
110 Simcoe	.....	54	123	113	189	118	131
111 Sioux Lookout	.....	.....	90	21	23	35	22
112 Smith's Falls	.....	.....	335	157	214	199	250
113 Southampton	.....	.....	161	55	61	60	54
114 Stayner	.....	.....	40	36	38	41	35
115 Strathroy	.....	.....	84	79	100	79	86
116 Sturgeon Falls	.....	.....	69	47	46	43	30
117 Sudbury	.....	.....	360	144	169	249	137
118 Thessalon	.....	.....	120	40	86	96	79
119 Thornbury	.....	.....	35	12	33	49	46
120 Thorold	.....	.....	190	72	173	131	108
121 Tilbury	.....	18	26	26	49	22	40
122 Tillsonburg	56	.....	126	80	110	145	111
123 Timmins	.....	68	77	71	42	54	66
124 Trenton	.....	.....	362	164	235	206	188
125 Trout Creek	.....	.....	28	6	16	15	18
126 Uxbridge	.....	.....	60	41	40	40	24
127 Vankleek Hill	.....	.....	33	10	22	33	27
128 Walkerton	.....	.....	65	30	65	46	55
129 Walkerville	.....	136	206	211	237	279	221
130 Wallaceburg	.....	.....	194	88	123	158	159
131 Waterloo	107	.....	118	101	173	198	156
132 Webbwood	.....	.....	63	8	30	33	31
133 Weston	.....	.....	143	96	176	165	181
134 Whitby	.....	.....	125	49	77	84	90
135 Wiarton	.....	.....	80	71	74	105	76
136 Wingham	36	.....	55	54	59	93	106
Totals	765	1,579	16,544	9,979	13,348	14,364	13,417
1 Rural Schools	.....	1,310	53,524	27,712	40,027	42,433	40,451
2 Cities	15,764	3,854	34,012	22,961	34,869	39,119	33,945
3 Towns	765	1,579	16,544	9,979	13,348	14,364	13,417
4 Villages	.....	153	5,477	3,615	4,705	4,984	5,100
5 Grand Totals, 1920	16,529	6,896	109557	64,267	92,949	100900	92,913
6 Grand Totals, 1919	16,386	5,802	108140	62,270	91,875	96,815	86,787
7 Increases	143	1,094	1,417	1,997	1,074	4,085	6,126
8 Decreases	.....	.....	.....	.....	.....	.....	.....
9 Percentages	3.39	1.41	22.44	13.17	19.04	20.67	19.03

* Including Protestant Separate School.

SCHOOLS (Continued)

VARIOUS BRANCHES OF INSTRUCTION (Continued)

	Beyond 4th Book	Art	Geography	Music	Literature	Composition	Grammar	English History	Canadian History
90	.....	736	736	736	736	736	187	578	578
91	.....	91	114	97	147	147	34	24	10
92	.....	1,013	745	1,013	846	1,013	207	402	666
93	.....	830	830	830	830	830	174	614	184
94	.....	970	636	970	705	705	253	405	381
95	.....	454	357	454	357	357	81	52	183
96	.....	573	348	573	348	573	142	348	348
97	.....	468	420	420	446	446	111	208	163
98	.....	755	368	368	755	368	368	252	252
99	.....	825	825	825	825	825	324	142	273
100	.....	159	159	159	159	159	54	67	61
101	.....	378	270	315	270	270	104	63	104
102	.....	867	650	867	551	570	256	256	256
103	19	374	230	308	374	230	66	92	111
104	.....	557	454	557	557	557	146	176	203
105	.....	346	259	.....	346	346	79	31	59
106	.....	69	44	69	69	69	24	31	29
107	.....	614	381	614	614	614	311	114	164
108	.....	506	364	506	506	364	72	42	87
109	.....	237	137	269	137	137	96	96	96
110	.....	728	728	728	728	728	131	373	373
111	4	195	114	195	195	195	61	21	40
112	.....	1,155	1,155	1,155	1,155	1,155	463	508	622
113	.....	391	230	391	230	175	54	54	114
114	.....	190	150	190	190	114	35	45	50
115	.....	428	280	428	428	428	86	131	165
116	.....	166	166	235	235	235	30	73	73
117	.....	1,059	1,059	1,059	1,059	1,059	137	199	187
118	.....	421	278	421	337	278	79	121	133
119	.....	175	128	175	128	128	46	36	46
120	.....	674	484	431	674	674	108	185	162
121	.....	181	111	181	181	181	48	96	96
122	.....	572	572	572	572	572	111	166	201
123	.....	310	208	258	208	208	156	156	156
124	.....	1,155	858	1,155	988	1,155	273	516	549
125	2	85	85	85	85	85	20	30	27
126	.....	205	205	205	205	205	24	74	104
127	.....	125	92	125	125	125	60	60	60
128	.....	261	206	261	261	261	55	101	166
129	.....	1,290	1,236	1,290	1,290	1,290	286	411	298
130	.....	722	722	722	722	722	159	438	438
131	.....	746	746	361	542	746	267	93	354
132	16	181	118	181	118	181	47	102	87
133	.....	761	522	761	522	522	346	181	346
134	.....	371	317	386	405	425	90	207	251
135	.....	406	326	330	406	406	76	110	181
136	.....	367	367	367	367	367	147	199	199
	179	68,224	56,125	63,074	61,208	62,075	17,819	24,355	29,003
1	2,217	198,406	158,768	154,391	177,254	175,278	52,526	73,416	87,949
2	1,461	168,737	154,162	167,916	165,260	165,230	45,949	67,574	86,950
3	179	68,224	56,125	63,074	61,208	62,075	17,819	24,355	29,003
4	223	23,665	19,682	19,263	20,800	21,422	6,956	9,514	12,111
5	4,080	459,032	388,737	404,644	424,522	424,005	123,250	174,859	216,013
6	3,654	445,150	373,741	397,522	410,316	410,210	111,843	163,364	202,999
7	426	13,882	14,996	7,122	14,206	13,795	11,407	11,495	13,014
8	.....	.....	.....	.....	.....	.....	.....	.....	.....
9	.83	94.04	79.64	82.90	86.97	86.86	25.25	35.82	44.25

THE PUBLIC

II. TABLE B—NUMBER OF PUPILS IN THE

Towns	Physiology and Hygiene	Nature Study	Physical Culture	Bookkeeping	Arithmetic and Mensuration	Algebra
90 Paris	736	736	736	.....	.....	.....
91 Parkhill	147	50	147	.....	.....	.....
92 Parry Sound	912	1,013	1,013	.....	.....	.....
93 Pembroke	830	830	830	.....	.. ..	.....
94*Penetanguishene	705	705	970	.....	.....	.....
95 Perth	183	357	454	.....	.....	.....
96 Petrolia	573	573	573	.....	.....	.....
97 Picton	446	446	468	.....	.....	.....
98 Port Colborne	252	368	755	.....	.....	.....
99 Port Hope	825	825	825	.....	.....	.....
100 Powassan	159	159	159	.....	.....	.....
101 Prescott	378	378	378	.....	.....	.....
102 Preston	826	867	867	.....	.....	.....
103 Rainy River	355	355	355	19	19	7
104 Renfrew	557	454	557	.....	.....	.....
105 Ridgetown	346	346	346	.....	.....	.....
106 Rockland	69	69	69	.....	.....	.....
107 St. Mary's	614	614	614	.....	.....	.....
108 Sandwich	506	506	506	.....	.....	.....
109 Seaforth	96	137	269	.....	.....	.....
110 Simcoe	728	728	728	75	.....	.....
111 Sioux Lookout	105	195	195	4	4	4
112 Smith's Falls	1,155	1,155	1,155	.....	.....	.....
113 Southampton	391	391	391	.....	.....	.....
114 Stayner	114	190	190	.....	.....	.....
115 Strathroy	428	428	428	86	.....	.....
116 Sturgeon Falls	119	166	235	.....	.....	.....
117 Sudbury	1,059	1,059	1,059	.....	.....	.....
118 Thessalon	421	421	421	.....	.....	.....
119 Thornbury	128	128	128	.....	.....	.....
120 Thorold	674	674	674	.....	.....	.....
121 Tilbury	181	181	181	.....	.....	.....
122 Tillsonburg	628	628	628	.....	.....	.....
123 Timmins	156	208	156	.....	.....	.....
124 Trenton	1,155	1,155	1,155	.....	.....	.....
125 Trout Creek	85	85	85	2	2	2
126 Uxbridge	205	205	205	.....	.....	.....
127 Vankleek Hill	125	125	125	.....	.....	.....
128 Walkerton	206	261	261	.....	.....	.....
129 Walkerville	1,290	1,290	1,290	.....	.....	.....
130 Wallaceburg	722	722	722	.....	.....	.....
131 Waterloo	853	853	853	.....	.....	.....
132 Webbwood	165	165	181	.....	16	16
133 Weston	522	522	761	.....	.....	.....
134 Whitby	425	425	425	.....	.....	.....
135 Wiarton	406	406	406	.....	.....	.....
136 Wingham	147	367	367	.....	.....	.....
Totals	62,321	65,097	68,348	388	179	164
1 Rural Schools	168,748	181,559	198,526	2,056	1,591	1,373
2 Cities	163,232	170,310	173,465	1,086	994	687
3 Towns	62,321	65,097	68,348	388	179	164
4 Villages	20,312	21,838	23,140	297	219	183
5 Grand Totals, 1920	414,613	438,804	463,479	3,827	2,983	2,407
6 Grand Totals, 1919	392,175	423,443	446,006	3,052	3,063	2,297
7 Increases	22,438	15,361	17,473	775	.....	110
8 Decreases	.....	.....	.....	.....	80	.....
9 Percentages	84.94	89.90	94.95	.78	.61	.49

*Including Protestant Separate School

SCHOOLS (Continued)
VARIOUS BRANCHES OF INSTRUCTION (Concluded)

	Geometry	Latin	French (beyond 4th Book)	French (Primer to 4th Book, incl.)	Elementary Science	Commercial Subjects	Agriculture	Manual Training	Household Science
90	.....	.....	.....	.....	.....	.....	.....	.....	376
91	.....	.....	.....	.....	.....	.....	.....	.....	.....
92	.....	.....	.....	.....	.....	.....	.....	.....	.....
93	.....	.....	.....	.....	.....	.....	401	518	455
94	.....	.....	.....	.....	.....	.....	56	.....	.....
95	.....	.....	.....	.....	.....	.....	52	.....	.....
96	.....	.....	.....	.....	.....	.....	.....	.....	.....
97	.....	.....	.....	.....	.....	.....	191	91	208
98	.....	.....	.....	.....	.....	.....	.....	.....	.....
99	.....	.....	.....	.....	.....	.....	.....	.....	.....
100	.....	.....	.....	.....	.....	.....	159	.....	.....
101	.....	.....	.....	.....	.....	.....	.....	191	.....
102	.....	.....	.....	.....	.....	.....	.....	.....	.....
103	7	19	.....	.....	19	.....	.....	.....	.....
104	.....	.....	.....	.....	.....	.....	165	.....	.....
105	.....	.....	.....	.....	.....	.....	.....	.....	.....
106	.....	.....	.....	.....	.....	.....	.....	69	.....
107	.....	.....	.....	.....	.....	.....	167	.....	.....
108	.....	.....	.....	.....	.....	.....	.....	.....	.....
109	.....	.....	.....	.....	.....	.....	.....	.....	.....
110	.....	.....	.....	.....	.....	.....	.....	.....	.....
111	.....	2	2	.....	.....	.....	.....	.....	.....
112	.....	.....	.....	.....	.....	.....	.....	209	233
113	.....	.....	.....	.....	.....	.....	.....	.....	.....
114	.....	.....	.....	.....	.....	.....	.....	.....	.....
115	.....	.....	.....	.....	.....	.....	34	.....	.....
116	.....	.....	.....	.....	.....	.....	.....	.....	.....
117	.....	.....	.....	.....	.....	.....	.....	.....	.....
118	.....	.....	.....	.....	.....	.....	.....	.....	.....
119	.....	.....	.....	.....	.....	.....	.....	.....	.....
120	.....	.....	.....	.....	.....	.....	.....	.....	.....
121	.....	.....	.....	.....	.....	.....	.....	.....	.....
122	.....	.....	.....	.....	.....	.....	.....	.....	.....
123	.....	.....	.....	.....	.....	.....	.....	.....	.....
124	.....	.....	.....	.....	.....	.....	.....	744	.....
125	2	.....	.....	.....	2	.....	35	.....	.....
126	.....	.....	.....	.....	.....	.....	.....	.....	.....
127	.....	.....	.....	.....	.....	.....	.....	.....	.....
128	.....	.....	.....	.....	.....	.....	.....	.....	.....
129	.....	.....	.....	.....	.....	.....	.....	685	530
130	.....	.....	.....	.....	.....	.....	264	.....	.....
131	.....	.....	.....	.....	.....	.....	354	.....	.....
132	13	16	16	.....	16	.....	.....	.....	.....
133	.....	.....	.....	.....	.....	.....	.....	.....	.....
134	.....	.....	.....	.....	.....	.....	57	.....	.....
135	.....	.....	.....	.....	.....	.....	.....	.....	.....
136	.....	.....	.....	.....	.....	.....	.....	.....	.....
	76	141	131	.....	175	77	4,298	8,166	3,565
1	416	537	302	3,041	992	316	44,448	17,001	6,673
2	486	54	54	.....	494	1,367	6,613	91,616	64,313
3	76	141	131	.....	175	77	4,298	8,166	3,565
4	89	64	86	279	175	42	2,468	2,447	680
5	1,067	796	573	3,320	1,836	1,802	57,827	119,230	75,231
6	1,010	733	401	2,593	1,628	1,913	53,134	116,231	69,967
7	57	63	172	727	208	.....	4,693	2,999	5,264
8	.....	.....	.....	.....	.....	111	.....	.....	.....
9	.21	.16	.11	.68	.37	.36	11.84	24.42	15.41

THE PUBLIC
III. TABLE C—TEACHERS, SALARIES,

Rural Schools	Teachers			Salaries			
	Number of Teachers	Male	Female	Highest salary male	Highest salary female	Average salary of male teachers	Average salary of female teachers
1 Brant	79	4	75	$1,400	$1,750	$1,125	$944
2 Bruce	170	20	150	1,100	1,150	932	896
3 Carleton	158	10	148	1,700	1,100	1,197	876
4 Dufferin	92	11	81	1,275	1,000	961	848
5 Dundas	79	12	67	1,200	1,000	1,008	894
6 Elgin	121	11	110	1,450	1,200	1,011	907
7 Essex	131	14	117	1,750	1,250	1,243	937
8 Frontenac	147	5	142	1,000	1,200	814	709
9 Glengarry	80	4	76	1,000	1,000	925	835
10 Grey	226	29	197	1,200	1,200	911	850
11 Haldimand	79	8	71	1,200	1,200	1,025	936
12 Haliburton	61	10	51	1,250	900	800	682
13 Halton	62	.....	62	.....	1,200	.....	902
14 Hastings	194	15	179	1,500	1,200	1,087	863
15 Huron	198	28	170	1,500	1,100	1,104	865
16 Kent	145	5	140	1,100	1,250	1,040	1,021
17 Lambton	173	14	159	1,200	1,200	993	872
18 Lanark	126	5	121	1,000	1,000	780	754
19 Leeds and Grenville	234	14	220	1,500	1,200	939	811
20 Lennox and Addington	120	3	117	800	1,100	667	683
21 Lincoln	85	11	74	1,500	1,300	1,048	880
22 Middlesex	201	10	191	1,050	1,050	935	872
23 Norfolk	106	14	92	1,200	1,100	962	890
24 Northumberland and Durham	211	21	190	1,200	1,000	1,005	877
25 Ontario	139	12	127	1,300	1,100	977	874
26 Oxford	128	16	112	1,400	1,300	1,092	939
27 Peel	81	6	75	1,400	1,200	1,217	940
28 Perth	117	16	101	1,335	1,200	1,035	935
29 Peterborough	102	10	92	1,200	1,200	880	806
30 Prescott and Russell	96	5	91	1,332	1,200	1,006	733
31 Prince Edward	77	5	72	1,000	1,000	1,000	868
32 Renfrew	163	6	157	1,200	1,600	967	876
33 Simcoe	229	24	205	1,600	1,200	994	908
34 Stormont	82	3	79	1,000	1,000	917	848
35 Victoria	114	9	105	1,300	1,000	1,017	837
36 Waterloo	96	19	77	1,500	1,250	1,095	956
37 Welland	113	15	98	2,150	1,200	1,267	962
38 Wellington	152	11	141	1,500	1,100	1,072	875
39 Wentworth	123	10	113	1,500	1,300	1,205	995
40 York	368	53	315	2,400	1,800	1,371	996
41 Algoma	84	6	78	1,200	1,100	1,033	810
42 Kenora	27	7	20	1,500	1,000	971	762
43 Manitoulin	51	7	44	1,300	1,000	971	785
44 Muskoka	104	2	102	800	1,000	700	636
45 Nipissing	55	5	50	1,400	1,000	930	737
46 Parry Sound	132	19	113	1,500	1,200	908	754
47 Rainy River	50	8	42	1,300	1,100	962	751
48 Sudbury	96	11	85	1,700	1,800	1,227	846
49 Timiskaming, etc	112	25	87	2,700	1,800	1,239	988
50 Thunder Bay	71	12	59	2,000	1,200	1,058	906
1 Totals, Rural Schools	6,240	600	5,640	2,700	1,800	1,059	868
2 Cities	3,957	564	3,393	3,500	2,975	2,150	1,262
3 Towns	1,444	145	1,299	3,000	1,700	1,674	941
4 Villages	512	88	424	2,500	1,200	1,254	839
5 Grand Totals, 1920	12,153	1,397	10,756	3,500	2,975	1,575	1,000
6 Grand Totals, 1919	11,803	1,233	10,570	2,800	2,500	1,348	817
7 Increases	350	164	186	700	475	227	183
8 Decreases	.....	.....	.....	.....	.....	.....	.....
9 Percentages	.....	11.49	88.50	.....	.....	.....	.....

SCHOOLS (Continued)
CERTIFICATES, EXPERIENCE, ETC.

Salaries—continued

	Average salary, male teachers with I Class certificates	Average salary female teachers with I Class certificates	Average salary, male teachers with II Class certificates	Average salary, female teachers with II Class certificates	Average salary, male teachers with III or District certificates	Average salary, female teachers with III or District certificates	Average salary, Kindergarten-Primary teachers
1	$	$ 1,092	$ 1,167	$ 927	$ 1,000	$	$ 1,250
2	.....	971	1,000	919	750	763	.....
3	.....	979	1,253	898	.....	757	.....
4	1,087	1,000	950	851	800	825	.....
5	950	930	1,014	894	.....	.....	.....
6	.....	970	1,011	907	.....	750	.....
7	1,100	1,048	1,378	933	933	855	.....
8	.....	893	960	882	775	690	.....
9	1,000	.....	900	856	.....	789	.....
10	950	910	969	874	700	794	.....
11	1,000	1,007	1,040	935	.....	812	.....
12	1,000	750	1,250	775	750	710	.....
13	.....	975	.....	897	.....	.....	.....
14	1,233	1,020	1,144	939	917	787	.....
15	1,056	871	1,112	869	.....	781	.....
16	1,000	1,063	1,050	1,020	.....	900	.....
17	1,017	960	986	868	.....	905	.....
18	.....	900	1,000	850	775	701	.....
19	500	879	971	857	787	753	.....
20	.....	737	.....	798	.....	660	.....
21	1,000	858	1,052	886	.....	750	.....
22	1,050	960	922	869	.....	850	.....
23	1,100	800	952	911	800	788	.....
24	.....	927	1,041	903	900	762	.....
25	925	887	1,008	881	800	784	.....
26	1,400	1,025	1,048	932	.....	.....	.....
27	1,400	933	1,180	941	.....	900	.....
28	1,200	990	1,034	934	875	800	.....
29	.....	900	1,000	889	825	728	.....
30	1,166	1,007	1,200	825	800	726	.....
31	.....	870	1,000	903	.....	775	.....
32	.....	1,033	1,000	960	.....	810	.....
33	1,250	962	974	917	1,000	850	.....
34	.....	890	917	853	.....	800	.....
35	1,000	1,000	1,050	873	800	726	.....
36	1,200	970	1,089	956	.....	.....	.....
37	.....	1,031	1,267	955	.....	.....	1,000
38	.....	870	1,096	881	.....	818	.....
39	1,500	1,096	1,172	981	.....	.....	.....
40	1,650	992	1,347	1,000	.....	767	.....
41	.....	900	1,125	943	.....	787	.....
42	.....	.....	1,000	900	990	830	.....
43	1,300	.....	1,000	907	900	777	.....
44	800	.....	.....	833	.....	633	.....
45	.....	.....	1,067	909	725	706	.....
46	1,300	1,067	1,167	856	775	737	.....
47	1,100	.....	1,125	887	.....	790	.....
48	1,500	1,325	1,319	1,028	750	772	.....
49	1,925	1,397	1,284	1,035	850	876	.....
50	.....	1,200	1,014	1,047	1,317	864	.....
1	1,196	979	1,105	913	872	761	1,125
2	2,287	1,202	1,928	1,288	.....	1,163	1,102
3	1,933	921	1,594	945	.....	867	977
4	1,377	872	1,242	847	900	715	950
5	2,104	1,075	1,367	1,034	873	768	1,088
6	1,960	898	1,101	844	664	592	812
7	144	177	266	190	209	176	276
8	.....	.....	.....	.....	.....	.....	.....
9	.....	.....	.....	.....	.....	.....	.....

THE PUBLIC

III. TABLE C—TEACHERS, SALARIES,

Rural Schools	Average salary Kindergarten teachers	Average salary Manual Training teachers	Average salary Household Science teachers	Average salary Male Temporary	Average Salary Female Temporary
	$	$	$	$	$
1 Brant					
2 Bruce				717	711
3 Carleton				700	604
4 Dufferin					750
5 Dundas					800
6 Elgin					
7 Essex					
8 Frontenac				600	585
9 Glengarry					817
10 Grey				750	693
11 Haldimand				1,000	
12 Haliburton				708	626
13 Halton					
14 Hastings				700	725
15 Huron					750
16 Kent					
17 Lambton					
18 Lanark				675	627
19 Leeds and Grenville				700	709
20 Lennox and Addington				667	583
21 Lincoln					
22 Middlesex					
23 Norfolk					787
24 Northumberland and Durham				800	756
25 Ontario					750
26 Oxford					
27 Peel					
28 Perth					
29 Peterborough				575	677
30 Prescott and Russell				700	591
31 Prince Edward					775
32 Renfrew				900	804
33 Simcoe				825	850
34 Stormont					
35 Victoria					646
36 Waterloo					
37 Welland					
38 Wellintgon				825	817
39 Wentworth					
40 York		1,400			750
41 Algoma				850	689
42 Kenora				850	715
43 Manitoulin				900	720
44 Muskoka				600	563
45 Nipissing					675
46 Parry Sound				731	675
47 Rainy River				700	678
48 Sudbury				700	673
49 Timiskaming, etc				900	800
50 Thunder Bay				825	815
1 Totals, Rural Schools		1,400		756	665
2 Totals, Cities	1,190	2,009	1,362		840
3 Totals, Towns	853	2,000	1,325		880
4 Totals, Villages				1,000	557
5 Grand Totals, 1920	1,174	1,999	1,361	760	667
6 Grand Totals, 1919	1,101	1,904	1,246	590	522
7 Increases	73	95	115	170	145
8 Decreases					
9 Percentages					

SCHOOLS (Continued)

CERTIFICATES EXPERIENCE, ETC.

	Number who have ever attended a Model School in Ontario.	Number who have ever attended a Normal School in Ontario	Number who have ever attended a Normal College or F of E in Ontario.	Number of University Graduates.	Certificates								
					1st Class or Interim 1st Class	2nd Class or Interim 2nd Class	3rd Class or Interim 3rd Class	District	Kindergarten Primary	Kindergarten	Manual Training	Household Science	Temporary
1	5	72	7	.....	6	71	1	.....	1	....	....	....	....
2	17	143	4	2	6	137	14	3	.....	....	....	....	10
3	11	128	7	.....	7	127	10	1	.....	....	....	....	13
4	4	85	3	.....	3	77	11	.....	.....	....	....	....	1
5	.....	72	6	.....	6	71	.....	.....	.....	....	....	....	2
6	13	115	6	.....	5	114	2	.....	.....	....	....	....	....
7	13	103	15	.....	14	103	14	.....	.....	....	....	....	....
8	64	58	7	2	7	33	35	27	.....	....	....	....	45
9	21	57	1	.....	1	54	22	....	.....	....	....	....	3
10	31	180	7	.....	7	169	30	1	.....	....	....	....	19
11	3	67	8	.....	9	65	4	.....	.....	....	....	....	1
12	29	6	1	.....	2	3	11	20	.....	....	....	....	25
13	5	57	5	.....	.....	4	58	.....	.....	....	....	....	....
14	78	99	8	.....	8	96	46	26	.....	....	....	....	18
15	8	181	13	1	10	181	4	.....	.....	....	....	....	3
16	2	134	9	.....	9	134	2	.....	.....	....	....	....	....
17	10	163	8	.....	9	159	5	.....	.....	....	....	....	....
18	29	60	2	.....	2	59	21	7	.....	....	....	....	37
19	62	117	9	1	9	132	67	1	.....	....	....	....	25
20	27	47	2	.....	2	43	18	10	.....	....	....	....	47
21	16	75	7	.....	7	76	2	.....	.....	....	....	....	....
22	5	193	8	.....	6	194	1	.....	.....	....	....	....	....
23	22	97	4	.....	3	87	13	1	.....	....	....	....	2
24	19	169	13	.....	13	158	28	1	.....	....	....	....	11
25	7	114	14	.....	14	110	11	.....	.....	....	....	....	4
26	13	115	11	.....	11	117	.....	.....	.....	....	....	....	....
27	1	76	4	.....	4	76	1	.....	.....	....	....	....	....
28	3	109	7	.....	7	107	3	.....	.....	....	....	....	....
29	18	61	3	1	2	55	17	6	.....	....	....	....	22
30	35	44	5	.....	4	43	17	1	.....	....	....	....	31
31	17	55	6	2	5	54	14	2	.....	....	....	....	2
32	83	73	3	.....	3	69	60	17	.....	....	....	....	14
33	39	189	11	2	10	182	33	1	.....	....	....	....	3
34	26	68	5	.....	5	65	12	.....	.....	....	....	....	....
35	15	92	4	.....	3	86	17	1	.....	....	....	....	7
36	9	91	6	.....	6	90	.....	.....	.....	....	....	....	....
37	19	104	8	.....	8	104	.....	.....	1	....	....	....	....
38	6	132	13	.....	11	130	7	.....	.....	....	....	....	4
39	4	108	15	.....	15	108	.....	.....	.....	....	....	....	....
40	67	336	30	.....	29	334	3	.....	.....	....	1	....	1
41	34	27	1	.....	1	26	25	12	.....	....	....	....	20
42	10	3	.....	.....	.....	3	8	2	.....	....	....	....	14
43	27	10	1	.....	1	8	15	14	.....	....	....	....	13
44	59	17	1	.....	1	12	34	26	.....	....	....	....	31
45	33	14	.....	.....	.....	12	25	9	.....	....	....	....	9
46	55	32	4	.....	4	30	35	24	.....	....	....	....	39
47	22	8	1	.....	1	8	5	15	.....	....	....	....	21
48	36	33	5	.....	5	33	16	18	.....	....	....	....	24
49	21	72	6	1	6	70	19	3	.....	....	....	....	14
50	31	22	1	.....	1	22	18	15	.....	....	....	....	15
1	1,184	4,463	325	12	312	4,355	756	264	2	....	1	....	550
2	1,543	3,068	695	117	726	2,708	14	1	203	172	58	70	5
3	415	1,270	148	5	153	1,225	20	3	25	9	2	2	5
4	92	447	44	4	39	448	15	1	1	....	....	....	8
5	3,234	9,248	1,212	138	1,230	8,736	805	269	231	181	61	72	568
6	3,359	8,932	1,156	108	1,177	8,441	870	260	118	283	48	73	533
7	.....	316	56	30	53	295	.....	9	113	....	13	....	35
8	125	.....	.....	.....	.....	.....	65	.....	.....	102	....	9	....
9	26.61	76.09	9.97	1.13	10.12	71.88	6.62	2.21	1.90	1.49	.50	.59	4.67

THE PUBLIC
III. TABLE C—TEACHERS, SALARIES,

Experience

	Number of teachers who at end of year had taught less than one year		One year, but less than two years		2 years, but but less than 3 years		3 years, but less than 4		4 years, but less than 5		5 years, but less than 6	
Totals	Male	Female	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
1 Rural Schools	168	1,178	64	992	46	943	38	546	28	454	18	323
2 Cities	20	60	17	152	13	175	30	217	52	179	31	202
3 Towns	4	68	3	108	4	139	7	112	4	113	7	89
4 Villages	5	18	8	45	4	51	7	51	5	41	4	21
5 Grand Totals, 1920	197	1,324	92	1,297	67	1,308	82	926	89	787	60	635
6 Percentages, Males	14.10		6.58		4.79		5.87		6.37		4.29	
7 Percentages, Females		12.31		12.06		12.16		8.61		7.31		5.90

	13 years, but less than 14		14 years, but less than 15		15 years, but less than 16		16 years, but less than 17		17 years, but less than 18		18 years, but less than 19	
Totals	Male	Female	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
1 Rural Schools	6	37	3	27	9	38	6	30	5	17	5	13
2 Cities	12	109	16	83	15	82	11	85	8	69	8	85
3 Towns	2	26	5	20	4	25	2	24	3	18	1	16
4 Villages	1	4	2	4	2	7		8		9		5
5 Grand Totals, 1920	21	176	26	134	30	152	19	147	16	113	14	119
6 Percentages, Males	1.50		1.86		2.15		1.36		1.14		1.00	
7 Percentages, Females		1.63		1.24		1.41		1.36		1.05		1.10

	26 years, but less than 27		27 years, but less than 28		28 years, but less than 29		29 years, but less than 30		30 years, but less than 31		31 years, but less than 32	
Totals	Male	Female	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
1 Rural Schools	5	7	6	9	6	9	6	7	13	3	6	3
2 Cities	14	36	12	52	12	33	10	36	13	36	9	23
3 Towns	7	13	4	6	3	9	4	7	3	13	2	7
4 Villages	1	1	2	2		1			2	3	3	
5 Grand Totals, 1920	27	57	24	69	21	52	20	50	31	55	20	33
6 Percentages, Males	1.93		1.72		1.50		1.43		2.22		1.43	
7 Percentages, Females		.53		.64		.48		.46		.51		.30

Average experience: male teachers, 13.2 years; female teachers, 7.9 years; all teachers, 8.5 years. Average experience, rural teachers, 4.3 years; urban teachers, 12.8 years.

SCHOOLS (Continued)
CERTIFICATES, EXPERIENCE, ETC. (Concluded)

Experience—continued

	6 years, but less than 7		7 years, but less than 8		8 years, but less than 9		9 years, but less than 10		10 years, but less than 11		11 years, but less than 12		12 years but less than 13	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
1	20	278	11	173	10	131	12	98	10	86	4	63	6	47
2	19	223	28	154	19	152	19	127	14	135	11	135	13	111
3	4	80	5	66	6	49	3	38	3	41	1	40	3	25
4	2	21	2	22	4	18	6	10	2	10	.....	11	1	13
5	45	602	46	415	39	350	40	273	29	272	16	249	23	196
6	3.22	.....	3.29	.....	2.79	.....	2.86	.....	2.07	.....	1.14	.....	1.64	.....
7	.....	5.59	.....	3.86	.....	3.25	.....	2.54	.....	2.53	.....	2.31	.....	1.82

	19 years, but less than 20		20 years, but less than 21		21 years, but less than 22		22 years, but less than 23		23 years, but less than 24		24 years, but less than 25		25 years, but less than 26	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
1	8	22	7	19	9	18	1	16	8	7	9	10	9	14
2	18	76	12	62	8	56	12	53	10	61	14	45	8	26
3	1	15	4	11	6	17	4	20	5	15	3	13	4	3
4	.....	3	1	4	1	6	4	5	.....	3	1	3	2	6
5	27	116	24	96	24	97	21	94	23	86	27	71	23	49
6	1.93	.....	1.72	.....	1.72	.....	1.50	.....	1.64	.....	1.93	.....	1.64	.....
7	.....	1.08	.....	.89	.....	.90	.....	.87	.....	.80	.....	.66	.....	.45

	32 years, but less than 33		33 years, but less than 34		34 years, but less than 35		35 years, but less than 36		36 years, but less than 37		37 years, but less than 38		38 years, but less than 39		39 years, but less than 40		40 years or over	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
1	3	4	3	2	4	3	2	2	9	1	2	2	6	3	2	2	7	3
2	7	33	10	38	3	33	4	46	5	21	3	20	4	19	3	14	17	39
3	3	10	5	7	2	2	1	3	2	4	2	4	3	6	....	5	6	12
4	1	1	1	....	1	2	1	4	2	1	....	1	5	2	2	1	3	6
5	14	48	19	47	10	40	8	55	18	27	7	27	18	30	7	22	33	60
6	1.00	.....	1.36	....	.71	....	.57	....	1.29	....	.50	....	1.29	....	.50	....	2.36	....
7	.....	.44	....	.43	....	.37	....	.51	....	.25	....	.25	....	.28	....	.20	....	.56

THE PUBLIC
IV TABLE D—SCHOOL HOUSES, MEDICAL

Rural Schools	School Houses						Medical and Dental Inspection				
	Number of Schools	Brick	Stone	Concrete	Frame	Log	No. of Schools where Medical Inspection is in force	No. of Schools where Nurse Inspection with Medical Supervision is in force	No of Schools where Nurse Inspection only (without Medical Supervision) is in force	No. of Nurses employed	No. of Schools where Dental Inspection is in force
1 Brant	61	48	2	1	10						
2 Bruce	166	120	15	1	30						
3 Carleton	177	35	19	5	55	3					
4 Dufferin	91	62	4	2	23						81
5 Dundas	76	6	9	1	60						
6 Elgin	105	82		2	21						
7 Essex	111	47	3	7	54				10	5	
8 Frontenac	143	13	20		105	5					
9 Glengarry	75	4		3	68						
10 Grey	221	128	50	2	41		15	1			
11 Haldimand	74	63		2	9		5				
12 Haliburton	59	3	3		48	5					
13 Halton	58	31	13	6	8						
14 Hastings	178	63	14	3	98						38
15 Huron	184	123	8	1	52						141
16 Kent	134	103		1	30						
17 Lambton	167	95	1	2	69						
18 Lanark	122	22	11		86	3		19			72
19 Leeds and Grenville	221	59	71	1	87	3					
20 Lennox and Addington	112	21	7	4	79	1	8				
21 Lincoln	68	36	7	1	24		2				
22 Middlesex	184	142		1	41		6				81
23 Norflok	99	69	6	6	18						
24 Northumberland and Durham	202	138	11	3	50		1				1
25 Ontario	119	79	1		38	1					
26 Oxford	108	90	4	1	13		6				2
27 Peel	73	54	6	3	10			4	58		
28 Perth	112	95	5		12		8		8		
29 Peterborough	99	48	3	3	40	5					
30 Prescott and Russell	83	10		1	66	6					
31 Prince Edward	76	37	11	2	26		1				
32 Renfrew	153	51	1	7	85	9					
33 Simcoe	209	148	2	11	48		21				15
34 Stormont	75	3		3	69						
35 Victoria	103	75	4		24						
36 Waterloo	82	61	16		5						19
37 Welland	79	51	5	5	18						
38 Wellington	142	96	37	4	5		2	1			
39 Wentworth	82	55	14	1	12						

SCHOOLS (Continued)
AND DENTAL INSPECTION, LIBRARIES, ETC.

	Religious Exercises				School Libraries		
	No. of Schools where Bible or selections therefrom used	No. of Schools where passages are memorized	No. of Schools opened and closed with prayer	No. of Schools where religious instructions is imparted as permitted by the regulations	No. of Rural Schools With a library	No. of Volumes	Value of Libraries
1	51	21	61	.....	61	17,136	$ 7,669
2	154	83	166	71	166	34,042	16,936
3	84	.....	114	.....	113	19,072	7,287
4	74	36	83	.....	91	9,062	3,286
5	76	.....	76	.....	75	20,788	7,567
6	93	34	102	.....	99	33,391	12,525
7	86	88	110	7	111	18,398	9,729
8	106	26	142	.....	143	17,917	6,578
9	21	.....	74	4	75	10,991	3,337
10	202	43	221	.....	219	34,321	12,268
11	63	11	74	5	74	15,216	6,639
12	52	18	58	8	55	5,679	2,084
13	55	15	58	.....	58	11,869	4,694
14	139	46	172	3	177	45,655	13,104
15	160	34	183	.....	184	36,221	10,879
16	102	59	129	19	133	28,036	11,014
17	145	50	167	.....	167	38,145	10,090
18	87	13	122	.....	122	17,469	6,274
19	145	9	215	.....	220	35,340	17,466
20	69	24	111	1	104	10,287	4,272
21	65	25	65	.....	65	20,124	8,057
22	159	104	184	1	184	29,001	11,055
23	80	21	99	.....	99	22,215	6,678
24	173	35	201	4	200	30,794	10,510
25	93	7	114	2	118	22,514	10,081
26	102	10	107	7	106	26,051	9,580
27	69	17	73	.....	72	10,891	3,331
28	95	15	108	13	112	20,397	6,926
29	71	14	93	9	99	17,941	6,312
30	42	1	56	.....	82	15,176	4,753
31	60	19	76	5	76	10,680	4,220
32	77	30	150	1	153	29,891	8,571
33	169	46	201	40	206	28,363	11,376
34	45	11	75	.....	75	11,941	4,577
35	75	6	100	2	103	23,290	6,427
36	56	24	82	5	82	18,170	5,458
37	77	14	78	.....	78	13,218	4,683
38	107	44	140	2	134	23,049	9,284
39	67	23	77	1	77	34,520	14,665

THE PUBLIC
IV. TABLE D—SCHOOL HOUSES, MEDICAL

Rural Schools	School Houses						Medical and Dental Inspection				
	Number of Schools	Brick	Stone	Concrete	Frame	Log	No. of Schools where Medical Inspection is in force	No. of Schools where Nurse In pection with Medical Supervision is in force	No. of Schools where Nurse Inspection only (without Medical Supervision) is in force	No. of Nurses Employed	No. of Schools where Dental Inspection is in force
40 York	165	135	1	3	26	....	.....	.....	4	2	.....
41 Algoma	78	10	1	2	60	5	.....	.....	.....	....	.....
42 Kenora	22	1	....	....	18	3	.....	.....	.....	....	.....
43 Manitoulin	49	2	2	7	35	3	.....	.....	.....	....	.....
44 Muskoka	103	24	2	1	67	9	.....	.....	.....	....	.....
45 Nipissing	56	5	....	....	42	9	4	.....	.....	....	.....
46 Parry Sound	119	14	3	4	86	12	1	.....	1	....	1
47 Rainy River	47	1	1	1	32	12	.....	.....	.....	....	.....
48 Sudbury	77	5	....	1	69	2	.....	1	.....	1	1
49 Timiskaming, etc.	91	5	....	....	74	12	1	1	9	1	2
50 Thunder Bay	65	7	....	....	47	11	4	.....	1	....	.....
Totals											
1 Rural Schools	5,495	2,675	393	115	2,193	119	85	27	91	9	454
2 Cities	315	280	21	....	14	....	143	143	148	112	225
3 Towns	241	187	19	6	28	1	30	10	50	37	31
4 Villages	156	133	9	3	11	....	12	3	5	2	17
5 Grand Totals, 1920	6,207	3,275	442	124	2,246	120	270	183	294	160	727
6 Grand Totals, 1919	6,179	3,242	442	141	2,242	112	402	.....	239	124	.....
7 Increases	28	33	....	....	4	8	.....	.....	55	36	.....
8 Decreases	.....	.....	....	17	.....	....	132	.....	.....	....	.....
9 Percentages	.....	52.76	7.12	1.99	36.18	1.93	4.34	2.94	4.73	....	11.71

SCHOOLS (Continued)
AND DENTAL INSPECTION, LIBRARIES, ETC. (Concluded)

	Religious Exercises				School Libraries		
	No. of Schools where Bible or selections therefrom used	No. of School where passages are memorized	No. of Schools opened and closed with prayer	No. of Schools where religious instruction is imparted as permitted by the regulations	No. of Rural Schools with a Library	No. of Volumes	Value of Libraries
40	152	62	163	.....	156	43,293	$ 14,130
41	73	49	76	2	66	7,912	2,904
42	15	3	22	1	8	793	605
43	45	5	49	.....	37	4,120	1,708
44	90	5	102	4	100	12,037	4,424
45	26	3	53	5	34	3,124	1,403
46	100	10	117	.....	117	14,980	5,781
47	36	6	46	.....	38	5,207	2,197
48	33	1	77	13	47	5,434	2,325
49	72	23	81	.....	79	9,079	3,473
50	57	7	62	.....	48	4,205	1,487
1	4,345	1,250	5,365	235	5,298	977,445	360,679
2	303	250	301	10	.....	.....	.....
3	230	72	225	7	.....	.....	.....
4	146	31	149	8	.....	.....	.....
5	5,024	1,603	6,040	260	.....	.....	.....
6	4,694	1,656	6,033	308	.....	.....	.....
7	330	.....	.....	.....	.....	.....	.....
8	.....	53	7	48	.....	.....	.....
9	80.94	25.82	97.30	4.18	.....	.....	.....

THE PUBLIC
V. TABLE E—FINANCIAL

Receipts

	Rural Schools	Legislative Grants	Municipal Grants (County)	Municipal Grants (Township)
		$ c.	$ c.	$ c.
1	Brant	11,147 64	1,057 87	34,929 00
2	Bruce	27,113 01	2,534 87	79,866 00
3	Carleton	22,307 33	372 35	83,252 62
4	Dufferin	15,112 06		42,300 00
5	Dundas	15,314 66	1,125 88	39,130 00
6	Elgin	16,905 43	1,506 27	68,800 00
7	Essex	20,295 73	1,359 20	66,984 25
8	Frontenac	36,976 07	1,119 95	43,895 55
9	Glengarry	12,781 64	830 44	29,950 00
10	Grey	27,710 24	2,416 46	103,975 54
11	Haldimand	11,044 79	1,389 66	46,200 00
12	Haliburton	30,884 50	2,353 40	9,760 87
13	Halton	7,039 72	677 19	35,800 00
14	Hastings	75,279 06	3,151 12	79,980 39
15	Huron	21,963 87	4,904 59	108,164 00
16	Kent	20,468 55	1,556 39	83,260 00
17	Lambton	16,400 70	2,407 05	96,880 00
18	Lanark	21,140 35	1,419 82	55,563 39
19	Leeds and Grenville	45,373 56	2,635 29	83,061 15
20	Lennox and Addington	20,339 37	1,766 47	33,800 00
21	Lincoln	11,377 54	995 11	37,600 00
22	Middlesex	21,935 60	2,334 48	99,797 85
23	Norfolk	13,299 67	1,132 19	58,956 23
24	Northumberland and Durham	27,264 32	1,727 19	92,053 50
25	Ontario	17,090 78	1,951 23	74,899 77
26	Oxford	17,617 68	1,752 84	66,369 50
27	Peel	10,303 82	908 74	46,700 00
28	Perth	12,267 45	1,439 81	69,300 00
29	Peterborough	34,046 21	1,063 02	27,969 47
30	Prescott and Russell	15,459 87	2,616 86	27,495 47
31	Prince Edward	10,263 94	850 29	41,937 50
32	Renfrew	53,123 95	1,811 65	67,297 15
33	Simcoe	30,983 24	2,665 14	128,403 75
34	Stormont	17,458 25	875 32	39,772 12
35	Victoria	21,391 53	1,359 59	53,117 00
36	Waterloo	13,447 05	998 24	30,720 00
37	Welland	33,577 90	1,230 27	89,302 50
38	Wellington	17,224 85	905 16	88,600 00
39	Wentworth	21,039 85	1,442 68	56,608 00
40	York	101,891 88	3,038 74	165,613 55
41	Algoma	26,075 06		7,050 00
42	Kenora	7,895 84		661 00
43	Manitoulin	16,253 96		6,350 00
44	Muskoka	31,538 79		18,482 76
45	Nipissing	16,195 85		5,378 20
46	Parry Sound	43,701 27		16,477 81
47	Rainy River	13,405 12		4,119 50
48	Sudbury	28,533 63		4,122 50
49	Timiskaming, etc	46,323 79		6,975 00
50	Thunder Bay	21,195 09		4,650 00
	Totals	1,227,782 06	65,682 82	2,662,332 89

SCHOOLS (Continued)

STATEMENT

Receipts

	Assessments levied on requisition of the Trustees	Debentures	Clergy Reserve Fund, balances and other sources	Total Receipts for all Public School purposes
	$ c.	$ c.	$ c.	$ c.
1	58,534 08	43,866 82	57,772 07	207,307 48
2	81,288 64	11,082 16	106,861 11	308,745 79
3	61,931 47	1,000 00	70,371 76	239,235 53
4	46,451 42	.....	52,600 28	156,463 76
5	33,517 04	105 00	33,309 09	122,501 67
6	70,051 47	21,114 49	115,224 53	293,602 19
7	94,941 10	10,367 43	97,358 70	291,306 41
8	43,218 72	.....	73,129 16	198,339 45
9	34,078 01	5,144 19	25,443 42	108,227 70
10	101,327 89	3,735 21	116,348 04	355,513 38
11	36,887 80	.....	65,802 20	161,324 45
12	11,094 28	3,126 29	16,410 83	73,630 17
13	30,068 51	.....	40,866 24	114,451 66
14	62,293 27	4,468 84	134,795 02	359,967 70
15	90,731 17	6,000 00	130,630 58	362,394 21
16	88,280 26	23,550 15	145,334 47	362,449 82
17	71,976 61	2,608 79	83,124 80	273,397 95
18	29,659 36	.....	46,653 63	154,436 55
19	85,434 77	4,032 50	118,730 30	339,267 57
20	38,712 55	3,084 58	53,647 03	151,350 00
21	71,001 63	784 66	84,166 31	205,925 25
22	113,460 30	24,018 12	124,763 59	386,309 94
23	43,873 92	.....	82,339 95	199,601 96
24	101,171 17	8,630 52	90,905 30	321,752 00
25	67,024 60	152 00	69,128 85	230,247 23
26	79,693 49	253 64	113,711 71	279,398 86
27	53,123 64	.....	62,039 10	173,075 30
28	70,782 97	8,500 00	72,987 33	235,277 56
29	43,620 62	200 00	46,587 53	153,486 85
30	37,240 67	7 79	53,970 40	136,791 06
31	27,971 66	407 61	35,719 77	117,150 77
32	42,167 84	4,620 73	87,457 83	256,479 15
33	103,765 04	806 57	154,569 90	421,193 64
34	26,503 27	2,509 00	33,600 72	120,718 68
35	41,656 22	7,654 03	50,970 19	176,148 56
36	81,418 73	11,409 66	97,381 66	235,375 34
37	50,471 26	97,594 59	94,003 56	366,180 08
38	63,812 32	10,257 53	101,273 86	282,073 72
39	107,525 69	57,777 00	115,889 15	360,282 37
40	283,223 82	596,639 69	394,242 30	1,544,649 98
41	47,689 18	.....	29,542 42	110,356 66
42	13,625 76	100 00	9,387 76	31,670 36
43	20,700 14	.....	16,629 93	59,934 03
44	27,211 93	1,275 00	29,765 21	108,273 69
45	21,049 35	3,107 74	14,539 94	60,271 08
46	42,334 34	.....	36,148 49	138,661 91
47	30,851 09	1,425 00	8,533 98	58,334 69
48	68,308 51	2,590 99	46,447 13	150,002 76
49	99,876 16	22,007 70	41,596 89	216,779 54
50	52,563 72	4,344 99	20,462 23	103,216 03
	3,104,197 46	1,010,361 01	3,803,176 25	11,873,532 49

THE PUBLIC
V. TABLE E—FINANCIAL

Expenditure

	Rural Schools	Teachers' Salaries	Sites and building school houses	Libraries, maps, apparatus, prizes and school books
		$ c.	$ c.	$ c.
1	Brant	68,963 69	40,843 60	769 01
2	Bruce	126,203 18	8,648 57	2,228 29
3	Carleton	121,296 48	11,099 36	2,142 50
4	Dufferin	69,957 89	4,149 36	1,432 46
5	Dundas	63,075 60	3,775 93	658 43
6	Elgin	96,821 59	27,715 12	2,464 02
7	Essex	111,571 08	30,580 31	1,924 61
8	Frontenac	85,973 64	6,531 12	1,093 50
9	Glengarry	58,173 95	7,091 88	804 96
10	Grey	167,144 70	11,351 43	1,575 62
11	Haldimand	62,145 53	5,194 77	737 66
12	Haliburton	37,130 96	1,494 38	1,236 39
13	Halton	49,168 43	6,533 51	645 56
14	Hastings	150,940 36	23,080 66	2,239 61
15	Huron	156,659 29	21,422 19	1,371 14
16	Kent	123,117 57	43,089 90	3,342 35
17	Lambton	132,420 87	7,511 09	1,734 04
18	Lanark	81,507 74	3,961 88	772 91
19	Leeds and Grenville	162,345 76	7,700 34	1,436 83
20	Lennox and Addington	73,053 62	3,612 41	768 79
21	Lincoln	67,959 14	16,129 12	1,298 62
22	Middlesex	155,813 22	39,027 78	1,884 07
23	Norfolk	80,400 23	3,778 71	1,811 35
24	Northumberland and Durham	159,241 02	16,753 58	2,096 70
25	Ontario	106,139 98	8,408 83	798 82
26	Oxford	107,029 54	7,815 04	1,540 14
27	Peel	67,428 23	10,957 23	599 99
28	Perth	93,440 66	18,181 60	1,082 46
29	Peterborough	72,343 75	5,460 23	931 70
30	Prescott and Russell	63,063 61	2,735 05	657 46
31	Prince Edward	57,605 05	1,344 86	1,030 91
32	Renfrew	117,966 43	8,998 81	904 73
33	Simcoe	177,743 12	30,721 58	2,204 13
34	Stormont	60,739 00	2,507 42	643 82
35	Victoria	84,816 63	13,017 88	763 65
36	Waterloo	83,503 50	15,564 50	1,212 27
37	Welland	97,089 42	137,053 49	1,199 59
38	Wellington	115,840 66	13,033 32	1,530 32
39	Wentworth	103,470 16	64,196 14	3,473 79
40	York	336,591 69	560,243 07	16,759 49
41	Algoma	57,051 16	7,323 03	1,609 26
42	Kenora	12,630 47	6,427 93	430 19
43	Manitoulin	33,674 92	1,355 29	595 07
44	Muskoka	56,668 70	2,402 64	386 71
45	Nipissing	30,662 45	7,737 48	917 33
46	Parry Sound	83,181 99	8,694 55	956 21
47	Rainy River	32,704 47	6,655 83	1,180 62
48	Sudbury	71,210 85	16,813 04	1,638 09
49	Timiskaming, etc	101,550 05	37,905 44	2,871 08
50	Thunder Bay	52,204 35	8,880 79	2,472 56
	Totals	4,737,436 38	1,355,512 07	84,859 81

SCHOOLS (Continued)

STATEMENT (Continued)

	Expenditure			
	Rent and repairs, fuel and other expense	Total expenditure for all Public School purposes	Value of school sites, buildings and furniture	Value of equipment
	$ c.	$ c.	$	$
1	33,495 91	144,072 21	372,170	13,821
2	53,642 82	190,722 86	275,080	40,263
3	43,413 11	177,951 45	423,615	19,010
4	21,027 94	96,567 65	218,723	24,331
5	16,798 74	84,308 70	126,700	14,580
6	53,363 34	180,364 07	446,400	28,413
7	47,652 22	191,728 22	474,649	22,562
8	23,027 60	116,625 86	181,604	18,176
9	16,415 97	82,486 76	127,959	9,911
10	65,700 73	245,772 48	465,875	31,292
11	16,887 97	84,965 93	181,963	12,615
12	10,134 74	49,996 47	53,800	5,917
13	20,578 43	76,925 93	166,250	9,630
14	41,648 95	217,909 58	330,911	29,080
15	65,815 03	245,267 65	377,075	26,610
16	48,006 06	217,555 88	591,900	22,800
17	39,279 62	180,945 62	339,340	26,262
18	17,642 73	103,885 26	177,869	14,648
19	41,727 33	213,210 26	343,782	33,790
20	21,658 18	99,093 00	143,288	11,502
21	37,180 14	122,567 02	415,474	18,014
22	62,806 88	259,531 95	515,571	28,032
23	22,147 63	108,137 92	257,220	14,042
24	39,607 42	217,698 72	419,575	29,478
25	44,424 56	159,772 19	397,615	22,200
26	48,786 19	165,170 91	343,588	20,357
27	35,354 26	114,339 71	289,930	15,110
28	38,844 42	151,549 14	293,600	21,220
29	15,131 39	93,867 07	140,375	6,835
30	16,306 98	82,763 10	267,342	10,413
31	13,112 88	73,093 70	96,841	10,161
32	33,046 54	160,916 51	282,180	32,995
33	52,807 63	263,476 46	456,360	36,680
34	17,115 89	81,006 13	137,256	13,165
35	34,187 93	132,786 09	203,180	14,140
36	34,123 30	134,403 57	257,450	13,010
37	33,444 07	268,786 57	624,600	12,431
38	47,826 11	178,230 41	348,017	32,839
39	64,772 53	235,912 62	473,201	25,982
40	291,162 03	1,204,756 28	2,603,317	45,729
41	18,818 79	84,802 24	156,434	9,579
42	4,840 50	24,329 09	32,958	2,072
43	9,284 69	44,909 97	57,100	5,150
44	18,864 89	78,322 94	124,608	11,121
45	9,974 46	49,291 72	69,286	4,265
46	18,189 37	111,022 12	137,544	15,074
47	10,467 30	51,008 22	70,433	5,326
48	26,856 38	116,518 36	253,133	11,328
49	45,888 93	188,215 50	266,644	14,966
50	22,640 28	86,197 98	100,123	11,267
	1,865,931 79	8,043,740 05	15,909,908	927,994

THE PUBLIC

V. TABLE E—FINANCIAL

Cities	Receipts: Legislative Grants	Municipal Grants (County)	Municipal Grants (Local) and Assessments	Debentures	Clergy Reserve Fund, balances and other sources	Total Receipts for all Public School purposes
	$ c.	$ c.	$ c.	$ c.	$c.	$ c.
1 Belleville	1,400 00	.....	65,336 45	.....	19,941 82	86,678 27
2 Brantford	4,071 24	.....	182,013 34	56,616 08	947 40	243,648 06
3 Chatham	1,814 78	.....	79,085 66	130,000 00	9,700 04	220,600 48
4 Fort William	4,537 26	.....	162,649 43	60,348 35	460 58	227,995 62
5 Galt	1,600 85	.....	75,000 00	.....	2,792 65	79,393 50
6 Guelph	2,711 23	.....	89,254 71	46,328 73	859 37	139,154 04
7 Hamilton	16,801 07	.....	726,821 63	387,797 33	6,410 91	1,137,830 94
8 Kingston	4,029 80	.....	178,778 85	.....	10,396 99	193,205 64
9 Kitchener	2,317 92	.....	109,404 83	128,256 81	952 46	240,932 02
10 London	11,259 52	.....	439,208 28	.....	125,747 37	576,215 17
11 Niagara Falls	1,489 00	.....	81,000 00	76,757 21	1,652 26	160,898 47
12 Ottawa	15,448 34	.....	552,219 94	245,419 00	69,135 77	882,223 05
13 Owen Sound	2,917 07	.....	69,490 00	.....	8,871 18	81,278 25
14 Peterborough	3,565 60	.....	116,200 00	232,588 61	5,753 63	358,107 84
15 Port Arthur	4,671 83	.....	103,000 00	43,000 00	16,855 04	167,526 87
16 St. Catharines	2,063 56	.....	98,942 88	108,000 00	38,248 65	247,255 09
17 St. Thomas	3,163 88	.....	102,518 98	.....	261 40	105,944 26
18 Sarnia	1,407 00	.....	81,453 17	.....	15,402 10	98,262 27
19 Sault Ste. Marie	4,686 42	.....	178,454 33	192,547 74	7,501 17	383,189 66
20 Stratford	3,135 75	.....	94,451 96	.....	1,090 75	98,678 46
21 Toronto	63,327 77	.....	4,712,655 23	.....	298,070 54	5,074,053 54
22 Welland	952 40	.....	32,000 00	.....	25,250 17	58,202 57
23 Windsor	3,987 50	.....	251,879 25	359,021 07	17,405 59	632,293 41
24 Woodstock	1,135 00	.....	44,763 75	2,000 00	2,240 67	50,139 42
Totals	162,494 79	.....	8,626,582 67	2,068,680 93	685,948 51	11,543,706 90
Towns						
1 Alexandria	33 00	.....	2,584 53	.....	415 99	3,033 52
2 Alliston	151 00	.....	6,625 35	.....	563 05	7,339 40
3 Almonte	225 00	.....	9,245 28	.....	2,480 46	11,950 74
4 Amherstburg	124 00	.....	9,025 00	.....	2,402 01	11,551 01
5 Arnprior	302 00	.....	12,312 28	6,669 96	3,862 29	23,146 53
6 Aurora	259 00	.....	11,700 00	.....	103 98	12,062 98
7 Aylmer	375 48	.....	11,209 52	.....	4,371 11	15,956 11
8 Bala	564 48	.....	1,848 96	.....	284 59	2,698 03
9 Barrie	884 60	.....	40,573 33	.....	2,175 89	43,633 82
10 Blenheim	154 00	.....	8,320 00	1,650 00	311 11	10,435 11
11 Blind River	420 79	.....	4,411 18	.....	280 40	5,112 37
12 Bonfield	652 54	.....	290 98	.....	594 26	1,537 78
13 Bothwell	76 00	.....	1,925 00	.....	66 23	2,067 23
14 Bowmanville	346 00	.....	11,600 00	.....	95 37	12,041 37
15 Bracebridge	757 29	.....	12,782 59	.....	1,304 47	14,844 35
16 Brampton	453 00	.....	18,589 00	.....	1,073 15	20,115 15
17 Bridgeburg	232 00	.....	51,736 24	.....	146 64	52,114 88
18 Brockville	1,379 25	.....	47,100 00	36,000 00	758 41	85,237 66
19 Bruce Mines	442 79	.....	5,715 00	.....	411 99	6,569 78
20 Burlington	224 00	.....	13,000 00	18,000 00	7,774 58	38,998 58
21 Cache Bay	390 79	.....	3,095 00	.....	85 58	3,571 37
22 Campbellford	347 00	.....	13,400 00	.....	951 88	14,698 88
23 Capreol	364 69	.....	6,543 93	1,572 95	618 71	9,100 28
24 Carleton Place	457 00	.....	16,500 00	6,300 00	842 61	24,099 61
25 Charlton	348 54	.....	2,011 98	.....	656 24	3,016 76
26 Chesley	302 00	.....	7,483 43	.....	2,799 33	10,584 76
27 Clinton	1,436 80	.....	7,000 00	.....	16 22	8,453 02
28 Cobalt	1,158 29	.....	39,564 25	.....	6,004 40	46,726 94
29 Cobourg	549 36	.....	16,516 00	.....	254 61	17,319 97
30 Cochrane	504 29	.....	15,033 41	.....	1,639 35	17,177 05
31 Collingwood	800 60	.....	37,944 52	.....	154 04	38,899 16
32 Copper Cliff	977 29	.....	29,055 93	.....	5,270 49	35,303 71

SCHOOLS (Continued)

STATEMENT (Continued)

	Expenditure					Value of school sites, buildings and furniture	Value of equipment
	Teachers' Salaries	Sites, and building school houses	Libraries, maps, apparatus, and other equipment, prizes and school books	Rent and repairs, fuel and other expenses	Total expenditure for all Public School purposes		
	$ c.	$ c.	$ c.	$ c.	$ c.	$	$
1	39,234 45	700 00	.....	35,513 86	75,448 31	400,000	10,000
2	127,449 78	55,567 14	9,842 44	49,778 96	242,638 32	534,250	63,600
3	56,728 83	135,348 71	2,771 80	25,751 14	220,600 48	400,000	5,700
4	113,092 61	65,163 85	9,996 64	39,696 12	227,949 22	931,995	23,738
5	54,518 72	1,932 12	.....	22,287 33	78,708 17	290,000	8,500
6	58,282 21	47,855 69	296 40	32,719 74	139,154 04	424,000	10,675
7	444,726 54	275,683 20	26,147 75	391,273 45	1,137,830 94	2,650,639	70,240
8	72,911 94	85,286 85	931 47	34,075 38	193,205 64	450,000	18,400
9	67,545 04	130,694 05	5,703 65	36,227 21	240,169 95	456,000	19,500
10	276,689 75	110,509 56	868 37	186,825 99	574,893 67	1,189,544	57,045
11	54,699 57	76,757 21	793 48	28,648 21	160,898 47	267,556	6,990
12	413,033 18	248,935 22	.....	175,951 81	837,920 21	1,863,140	120,000
13	52,132 25	659 51	967 01	27,519 48	81,278 25	212,000	12,000
14	86,831 30	129,690 29	6,565 85	46,708 98	269,796 42	321,405	17,000
15	68,544 27	54,878 70	5,144 04	33,890 41	162,457 42	623,000	2,500
16	67,928 60	134,930 60	1,287 00	35,437 75	239,583 95	625,000	5,892
17	68,088 22	.....	5,759 46	10,869 25	84,716 93	250,000	13,000
18	55,758 70	9,069 64	1,719 94	29,857 67	96,405 95	330,200	2,776
19	107,730 16	193,647 74	6,480 80	68,907 53	376,766 23	1,101,500	40,600
20	54,677 96	3,136 86	9,824 97	30,989 58	98,629 37	497,200	12,500
21	2,947,333 18	40,792 02	91,206 99	1,994,721 35	5,074,053 54	12,161,817	128,194
22	32,375 11	1,431 16	.....	19,001 36	52,807 63	132,985	1,438
23	167,198 15	351,253 66	1,517 05	112,324 55	632,293 41	1,534,355	50,000
24	32,609 75	108 75	2,410 46	15,010 46	50,139 42	300,000	10,000
	5,520,120 27	2,154,002 53	190,235 57	3,483,987 57	11,348,345 94	27,946,586	710,288
1	1,613 00	.....	.....	819 47	2,432 47	6,500	200
2	4,075 00	400 00	.....	2,545 44	7,020 44	40,000	180
3	6,900 00	1,535 00	.....	3,515 74	11,950 74	15,235	271
4	6,920 00	200 00	500 00	3,760 88	11,380 88	47,000	10,000
5	9,695 00	8,719 70	34 24	3,643 22	23,092 16	26,700	496
6	8,257 47	836 94	.....	2,784 77	11,879 18	35,000	1,000
7	8,414 00	2,495 67	.....	2,861 73	13,771 40	19,500	900
8	1,780 00	498 58	24 47	327 46	2,630 51	10,000	230
9	29,116 34	1,924 76	1,185 41	10,960 31	43,186 82	210,000	2,039
10	5,883 94	1,596 23	.....	2,074 08	9,554 25	19,000	3,300
11	3,500 00	62 92	74 50	1,184 61	4,822 03	12,000	260
12	767 50	.....	.....	22 50	790 00	.....	175
13	1,530 74	.....	.....	416 35	1,947 09	20,000	150
14	8,955 96	269 30	.....	2,743 14	11,968 40	46,000	846
15	10,016 00	399 48	.....	4,405 43	14,820 91	20,500	425
16	14,319 50	694 37	.....	5,101 28	20,115 15	65,650	550
17	9,450 00	36,402 08	109 10	6,153 70	52,114 88	150,000	700
18	32,309 17	36,375 00	1,060 27	14,731 26	84,475 70	140,000	5,200
19	3,315 50	26 00	23 50	2,054 97	5,419 97	30,000	203
20	9,372 64	23,442 96	122 70	5,906 61	38,844 91	90,000	500
21	2,476 00	178 00	14 76	838 51	3,507 27	6,000	1,000
22	11,758 75	.....	132 19	2,571 51	14,462 45	50,000	2,500
23	3,255 22	2,169 40	228 78	3,403 03	9,056 43	25,000	500
24	11,856 73	7,278 39	.....	4,833 66	23,968 78	56,500	900
25	1,867 72	.....	.....	290 15	2,157 87	4,000	250
26	5,432 47	711 52	78 76	4,115 18	10,337 93	28,000	200
27	6,402 65	.....	.....	1,569 90	7,972 55	32,750	850
28	23,210 00	5,093 45	878 38	16,611 34	45,793 17	71,000	10,500
29	13,087 63	.....	.....	3,417 93	16,505 56	120,000	5,000
30	8,104 13	502 35	253 47	6,231 36	15,091 31	40,000	3,000
31	24,790 00	242 57	11 75	13,854 84	38,899 16	112,400	11,200
32	19,600 33	.....	233 74	13,515 73	33,349 80	70,000	5,000

THE PUBLIC

V. TABLE E—FINANCIAL

Towns	Receipts													
	Legislative Grants		Municipal Grants (County)		Municipal Grants (Local) and Assessments		Debentures		Clergy Reserve Fund, balances and other sources		Total Receipts for all Public School purposes	
	$	c.	$	c.	$	c.	$	c.	$	c.	$	c.
33 Cornwall	1,605	50			18,262	60			1,856	04	21,724	14
34 Deseronto	227	00	150	10	7,500	00			417	57	8,294	67
35 Dresden	163	00			6,322	55			82	67	6,568	22
36 Dryden	445	29			6,408	42			125	59	6,979	30
37 Dundas	575	00			20,650	00			878	75	22,103	75
38 Dunnville	449	50			10,959	37			548	90	11,957	77
39 Durham	180	00			6,447	81			86	01	6,713	82
40 Eastview	177	00			11,857	09			131	49	12,165	58
41 Englehart	447	54			4,846	00	580	68	96	29	5,970	51
42 Essex	183	00			8,500	84			921	46	9,605	30
43 Ford	132	00			12,498	13	5,768	54	176	41	18,575	08
44 Forest	169	00			8,070	00			394	00	8,633	00
45 Fort Frances	617	29			18,000	00			1,705	35	20,322	64
46 Gananoque	396	40			17,172	44			358	77	17,927	61
47 Goderich	499	80			18,181	76			343	12	19,024	68
48 Gore Bay	547	79			4,949	93			111	17	5,608	89
49 Gravenhurst	554	29			7,402	37			73	25	8,029	91
50 Haileybury	720	29			15,287	78			232	97	16,241	04
51 Hanover	295	50			11,658	50			561	12	12,515	12
52 Harriston	167	00			5,014	44			3	06	5,184	50
53 Hawkesbury	124	71			4,452	39			1,652	88	6,229	98
54 Hespeler	406	60			17,212	70	51,962	89	485	42	70,067	61
55 Huntsville	672	29			9,399	41			438	67	10,510	37
56 Ingersoll	658	60			18,111	00	116,000	00	2,644	14	137,413	74
57 Iroquois Falls	570	79			19,394	53			55,243	44	75,208	76
58 Kearney	600	29			1,471	93			266	26	2,338	48
59 Keewatin	537	29			9,015	64	6,500	00	618	58	16,671	51
60 Kenora	1,168	79			35,671	12			890	83	37,730	74
61 Kincardine	228	00			8,270	24			1,567	14	10,065	38
62 Kingsville	411	54	401	54	13,678	14			52	74	14,543	96
63 Latchford	334	54			1,152	07			1,718	31	3,204	92
64 Leamington	418	20			24,344	48			218	00	24,980	68
65 Leaside					4,500	00			5	10	4,505	10
66 Lindsay	722	00			33,909	49			1,123	98	35,755	47
67 Listowel	304	00			11,210	00			198	88	11,712	88
68 Little Current	475	79			5,438	00			533	55	6,447	34
69 Massey	390	29			3,529	00			959	14	4,878	43
70 Matheson	449	54			2,266	96			112	49	2,828	99
71 Mattawa	806	29			808	29			2,848	55	3,963	13
72 Meaford	325	00			14,450	00			223	86	14,998	86
73 Merritton					11,158	00			5,171	21	16,329	21
74 Midland	890	00			48,592	83	32,700	00	1,670	43	83,853	26
75 Milton	214	00			7,972	00			1,324	57	9,510	57
76 Mimico	556	03	200	03	38,594	00	14,000	00	5,308	39	58,658	45
77 Mitchell	212	00			8,800	00			272	13	9,284	13
78 Mount Forest	159	00	69	85	5,300	00			766	96	6,295	81
79 Napanee	377	00			13,219	00			1,845	43	15,441	43
80 New Liskeard	684	29			11,800	00			709	38	13,193	67
81 Newmarket	374	68			15,000	00			2,469	23	17,843	91
82 New Toronto	403	50			19,312	95			518	71	20,235	16
83 Niagara	192	60	3	40	6,350	76			719	47	7,266	23
84 North Bay	1,655	05			52,415	00			5,271	32	59,341	37
85 Oakville	297	60			46,380	26			1,379	86	48,057	72
86 Orangeville	482	15			12,347	08			401	85	13,231	08
87 Orillia	2,054	00			66,312	30			8,213	94	76,580	24
88 Oshawa	1,047	00			56,705	63			1,191	46	58,944	09
89 Palmerston	204	00			5,913	13			60	26	6,177	39
90 Paris	622	00			19,300	00			1,001	45	20,923	45
91 Parkhill	104	80			3,450	00			59	37	3,614	17

SCHOOLS (Continued)

STATEMENT (Continued)

	Expenditure					Value of school sites, buildings and furniture	Value of equipment
	Teachers' Salaries	Sites, and building school houses	Libraries, maps, apparatus and other equipment, prizes and school books	Rent and repairs, fuel and other expenses	Total expenditure for all Public School purposes		
	$ c.	$ c.	$ c.	$ c.	$ c.	$	$
33	14,405 50	.....	.....	5,692 79	20,098 29	45,000	4,000
34	6,272 15	.....	99 28	1,263 11	7,634 54	12,225	1,775
35	5,056 00	.....	72 00	1,384 72	6,512 72	18,000	80
36	4,710 00	.....	227 13	1,337 30	6,274 43	7,000	500
37	15,630 55	901 23	23 01	4,885 88	21,440 67	178,030	1,000
38	9,163 63	284 08	22 75	2,236 69	11,707 15	25,000	4,000
39	5,247 50	5 95	57 02	1,392 62	6,703 09	12,000	400
40	7,877 92	1,562 72	.....	2,253 09	11,693 73	45,200	418
41	3,734 31	.....	106 83	2,129 37	5,970 51	15,000	400
42	7,831 25	.....	60 50	1,696 88	9,588 63	20,000	2,000
43	7,976 06	5,303 85	124 60	5,166 46	18,570 97	42,000	2,000
44	5,865 75	150 96	21 00	2,595 29	8,633 00	45,000	500
45	10,424 34	771 96	3,209 84	5,675 18	20,081 32	75,000	500
46	12,202 19	527 54	19 00	4,857 13	17,605 86	25,525	3,000
47	13,319 88	.....	.....	5,673 01	18,992 89	45,000	1,300
48	3,571 52	.....	.....	1,212 74	4,784 26	6,000	150
49	6,174 78	.....	.....	1,801 60	7,976 38	18,000	510
50	11,797 50	683 31	71 21	3,615 42	16,167 44	38,000	2,700
51	9,030 39	221 71	38 64	3,005 18	12,295 92	25,500	1,000
52	3,611 50	.....	9 12	1,167 14	4,787 76	20,000	2,000
53	3,635 87	.....	70 15	849 19	4,555 21	25,000	1,000
54	12,243 82	47,442 43	.....	4,574 00	64,260 25	90,000	2,000
55	7,219 77	713 36	.....	2,537 24	10,470 37	25,000	2,100
56	14,696 98	114,735 64	62 27	6,354 48	135,849 37	75,100	5,000
57	10,460 48	54,235 42	308 08	9,236 52	74,240 50	110,000	1,320
58	1,535 80	.....	114 97	423 58	2,074 35	3,625	265
59	6,380 00	5,993 51	84 10	3,256 52	15,714 13	25,000	1,000
60	24,126 60	723 30	96 25	12,781 12	37,727 27	51,220	1,225
61	5,905 00	.....	.....	2,368 90	8,273 90	26,570	2,400
62	9,467 50	1,482 78	97 11	2,267 14	13,314 53	30,000	1,000
63	1,871 50	270 95	.....	724 02	2,866 47	3,000	150
64	14,252 78	7,308 63	.....	3,419 27	24,980 68	75,000	2,500
65	800 00	2,586 63	463 72	367 35	4,217 70	.....	2,700
66	25,433 00	289 05	.....	9,239 49	34,961 54	10,000	400
67	8,343 58	375 00	.....	2,976 92	11,695 50	40,000	2,000
68	4,192 19	80 50	154 43	951 85	5,378 97	10,000	1,000
69	3,747 00	.....	23 00	967 28	4,737 28	3,856	1,361
70	1,976 37	.....	.....	675 58	2,651 95	3,850	700
71	946 39	296 11	12 75	202 55	1,457 80	2,600	200
72	11,096 53	.....	.....	3,235 87	14,332 40	37,000	750
73	6,882 57	445 00	.....	2,773 98	10,101 55	49,000	475
74	31,216 08	32,581 44	15 00	19,768 31	83,580 83	160,000	3,000
75	5,572 82	72 00	.....	2,759 50	8,404 32	30,000	300
76	18,151 60	29,434 68	.....	9,309 21	56,895 49	175,000	1,200
77	6,797 20	.....	18 00	2,293 18	9,108 38	50,000	600
78	4,094 51	72 38	.....	2,089 49	6,256 38	14,500	1,000
79	10,141 75	.....	.....	2,555 08	12,696 83	37,000	3,000
80	9,759 82	.....	14 88	3,384 54	13,159 24	30,000	450
81	12,210 00	1,696 15	97 02	3,598 94	17,602 11	80,000	2,000
82	9,760 08	3,189 37	490 80	6,794 91	20,235 16	53,000	1,500
83	4,427 92	532 70	41 11	1,584 55	6,586 28	17,500	2,500
84	31,744 23	5,455 30	1,400 12	19,960 86	58,560 51	200,000	15,000
85	11,299 50	31,037 65	.....	5,689 76	48,026 91	74,000	750
86	9,381 50	.....	38 89	3,341 62	12,762 01	20,000	4,000
87	27,275 98	2,543 54	212 47	10,362 17	40,394 16	130,000	2,000
88	40,355 39	1,610 15	.....	15,582 22	57,547 76	250,000	1,000
89	4,600 55	180 00	.....	1,307 59	6,088 14	40,000	1,000
90	13,859 50	319 57	453 39	5,463 78	20,096 24	100,000	2,000
91	2,456 35	.....	.....	888 56	3,344 91	5,850	150

THE PUBLIC

V. TABLE E—FINANCIAL

Towns	Receipts															
	Legislative Grants		Municipal Grants (County)		Municipal Grants (Local) and Assessments		Debentures		Clergy Reserve Fund, balances and other sources		Total Receipts for all Public School purposes	
	$	c	$	c.	$	c.	$	c.	$	c.	$	c.
92 Parry Sound...	1,106	29	.....		25,022	84	.....		1,054	97	27,184	10
93 Pembroke.....	627	88	221	58	35,131	80	12,785	00	5,869	16	54,635	42
94*Penetanguishene	435	00	.....		20,338	52	.....		581	04	21,354	56
95 Perth.....	280	00	.....		15,227	60	.....		314	08	15,821	68
96 Petrolia.....	382	00	.....		14,000	00	.....		1,586	36	15,968	36
97 Picton.....	466	60	.....		13,188	35	.....		107	51	13,762	46
98 Port Colborne..	511	00	.....		25,000	00	39,818	61	4,863	62	70,193	23
99 Port Hope.....	534	50	.....		16,000	00	.....		719	89	17,254	39
100 Powassan.....	427	29	.....		4,315	00	.....		280	52	5,022	81
101 Prescott.....	362	00	.....		8,646	58	.....		710	57	9,719	15
102 Preston.....	521	60	.....		27,500	00	37,900	20	742	25	66,664	05
103 Rainy River....	550	78	.....		15,576	29	.....		558	75	16,685	82
104 Renfrew.....	1,631	00	.....		16,243	92	.....		2,318	72	20,193	64
105 Ridgetown.....	229	00	.....		6,416	25	.....		517	90	7,163	15
106 Rockland.....	39	00	.....		1,653	35	.....		265	09	1,957	44
107 St. Mary's.....	575	00	.....		13,915	00	8,679	08	736	95	23,906	03
108 Sandwich.....	224	00	.....		15,000	00	.....		10,536	93	25,760	93
109 Seaforth.....	216	60	.....		6,992	41	.....		496	39	7,705	40
110 Simcoe.....	408	68	.....		18,940	41	.....		3,542	75	22,891	84
111 Sioux Lookout..	366	73	.....		6,417	74	.....		498	70	7,283	17
112 Smith's Falls...	887	00	.....		26,245	00	.....		5,200	87	32,332	87
113 Southampton..	175	00	.....		7,276	13	2,500	00	599	76	10,550	89
114 Stayner.....	111	00	.....		5,000	00	.....		2,924	55	8,035	55
115 Strathroy.....	319	65	.....		10,642	08	.....		127	36	11,089	09
116 Sturgeon Falls..	449	28	.....		7,936	23	.....		1,939	80	10,325	31
117 Sudbury.....	1,167	28	.....		37,951	15	45,000	00	1,644	80	85,763	23
118 Thessalon.....	595	28	.....		8,127	42	.....		76	81	8,799	51
119 Thornbury.....	86	00	.....		5,612	08	.....		3	45	5,701	53
120 Thorold.....	313	00	.....		21,500	00	.....		2,100	19	23,913	19
121 Tilbury.....	80	00	.....		3,879	53	.....		113	77	4,073	30
122 Tillsonburg....	416	60	.....		16,300	00	.....		684	09	17,400	69
123 Timmins.....	608	78	.....		16,788	26	.....		1,935	13	19,332	17
124 Trenton.....	731	40	.....		17,500	00	.....		12,888	17	31,119	57
125 Trout Creek....	357	78	.....		1,474	04	.....		540	45	2,372	27
126 Uxbridge.....	193	00	.....		6,500	00	.....		700	35	7,393	35
127 Vankleek Hill..	84	00	.....		3,089	72	.....		2,881	50	6,055	22
128 Walkerton.....	163	00	.....		7,324	49	.....		276	41	7,763	90
129 Walkerville....	1,113	10	.....		69,000	00	.....		2,575	30	72,688	40
130 Wallaceburg...	324	00	.....		17,617	26	.....		2,288	17	20,229	43
131 Waterloo.....	505	60	.....		23,883	35	.....		867	74	25,256	69
132 Webbwood.....	405	28	.....		3,925	05	.....		567	47	4,897	80
133 Weston.....	304	00	.....		28,926	82	.....		22,323	43	51,554	25
134 Whitby.....	332	00	.....		10,200	00	35,000	00	4,471	65	50,003	65
135 Wiarton.....	164	40	.....		6,606	01	.....		116	52	6,886	93
136 Wingham.....	275	68	.....		8,323	32	.....		183	59	8,782	59
Totals.....	63,936	37	1046	50	2,059,095	05	479,387	91	272,364	29	2,875,830	12
Totals												
1 Rural Schools...	1227782	06	6568282		5,766,530	35	1,010,361	01	3803176	25	11,873,532	49
2 Cities.....	162,494	79	.....		8,626,582	67	2,068,680	93	685,948	51	11,543,706	90
3 Towns.....	63,936	37	1046	50	2,059,095	05	479,387	91	272,364	29	2,875,830	12
4 Villages.....	24,951	63	3491	68	597,919	33	55,760	47	150,656	88	832,779	99
5 Grand T'tls, 1920	1479164	85	7022100		17,050,127	40	3,614,190	32	4912145	93	27,125,849	50
6 Grand T'tls, 1919	1217481	74	.....		13,106,056	84	2,207,840	70	3758506	97	20,289,886	25
7 Increases.....	261,683	11	.....		3,944,070	56	1,406,349	62	1153638	96	6,835,963	25
8 Percentages.....	5.45		.26		62.85		13.32		13.11		.....	

*Including Protestant Separate School.

SCHOOLS (Concluded)

STATEMENT (Concluded)

	Expenditure					Value of School Sites buildings and furniture	Value of equipment
	Teachers' Salaries	Sites, and building school houses	Libraries, maps, apparatus and other equipment, prizes and schoolbooks	Rent and repairs, fuel and other expenses	Total expenditures for all Public School purposes		
	$ c.	$ c.	$ c.	$ c.	$ c.	$	$
92	18,703 05	.....	35 75	6,789 84	25,528 64	95,000	5,000
93	18,410 78	17,478 40	381 14	18,151 68	54,422 00	200,000	1,300
94	15,351 39	57 60	248 75	5,123 72	20,781 46	58,825	1,250
95	9,237 25	2,421 32	.....	4,163 11	15,821 68	50,000	1,500
96	10,287 86	.....	125 00	4,097 35	14,510 21	43,000	3,000
97	9,648 80	143 78	.....	3,944 82	13,737 40	19,800	3,900
98	14,771 13	42,991 89	1,026 38	8,549 48	67,338 88	110,000	700
99	12,797 55	5 50	.....	3,366 30	16,169 35	61,990	2,000
100	3,200 00	91 40	10 33	507 14	3,808 87	8,500	190
101	6,642 58	500 00	10 55	2,460 30	9,613 43	21,164	1,427
102	17,033 00	38,573 48	1,032 27	8,463 64	65,102 39	160,000	7,000
103	9,524 02	1,322 14	.....	5,834 31	16,680 47	26,000	403
104	12,202 66	.....	91 05	7,899 93	20,193 64	75,000	5,000
105	5,826 78	.....	.....	1,336 37	7,163 15	32,500	290
106	1,630 91	.....	.....	278 29	1,909 20	2,850	130
107	11,128 18	7,486 10	.....	3,823 66	22,437 94	75,000	740
108	13,104 00	8,109 78	.....	4,547 15	25,760 93	185,000	5,000
109	5,635 46	.....	15 65	1,683 81	7,334 92	12,500	500
110	13,243 48	2,253 00	980 89	6,414 47	22,891 84	50,000	557
111	,907 55	1,136 56	113 92	2,003 52	7,161 55	18,317	612
112	23,031 00	145 00	24 04	9,132 83	32,332 87	180,000	12,000
113	6,325 00	1,820 28	23 65	1,504 50	9,673 43	22,600	2,600
114	3,182 50	.....	9 72	1,135 59	4,327 81	14,500	243
115	8,712 18	.....	19 65	2,349 32	11,081 15	23,000	462
116	5,996 20	399 45	347 11	3,350 17	10,092 93	30,000	2,000
117	25,900 39	43,874 75	104 23	11,704 10	81,583 47	265,000	1,200
118	6,055 40	.....	.....	1,835 92	7,891 32	29,000	385
119	2,954 98	1,210 69	.....	1,372 67	5,538 34	30,000	1,600
120	11,011 81	1,584 75	.....	8,053 32	20,649 88	60,000	500
121	2,309 06	182 95	29 88	550 93	3,072 82	21,000	221
122	12,104 67	586 19	253 24	4,456 59	17,400 69	45,000	5,000
123	11,717 88	723 66	127 18	4,630 77	17,199 49	42,459	5,408
124	19,309 50	.....	822 96	10,425 57	30,558 03	100,000	3,000
125	1,670 00	61 00	.....	637 62	2,368 62	3,050	343
126	5,765 00	.....	.....	1,391 44	7,156 44	20,500	500
127	2,971 41	.....	.....	871 02	3,842 43	10,000	1,000
128	4,957 54	.....	65 05	2,371 09	7,393 68	20,000	2,700
129	41,163 66	1,833 24	715 48	27,331 11	71,043 49	547,400	12,400
130	13,228 33	410 85	121 79	5,204 06	18,965 03	35,000	800
131	16,800 60	489 77	1,158 09	6,554 60	25,003 06	47,000	4,600
132	3,617 25	.....	.....	1,075 38	4,692 63	11,000	500
133	16,554 58	19,540 24	.....	10,182 11	46,276 93	139,500	940
134	7,850 00	38,447 61	60 20	3,386 70	49,744 51	68,000	3,000
135	5,630 52	64 12	24 30	1,167 99	6,886 93	15,000	300
136	5,674 38	320 17	.....	1,859 15	7,853 70	50,000	300
	1,378,034 89	722,436 89	21,374 71	615,198 25	2,737,044 74	7,633,341	270255
1	4,737,436 38	1,355,512 07	84,859 81	1,865,931 79	8,043,740 05	15,909,908	927,994
2	5,520,120 27	2,154,002 53	190,235 57	3,483,987 57	11,348,345 94	27,946,586	710,288
3	1,378,034 89	722,436 89	21,374 71	615,198 25	2,737,044 74	7,633,341	270,255
4	420,465 03	95,521 00	5,951 99	192,978 04	714,916 06	1,942,905	100,157
5	12,056,056 57	4,327,472 49	302,422 08	6,158,095 65	22,844,046 79	53,432,740	2008694
6	9,362,876 25	2,508,459 04	276.049 41	4,683,461 47	16,830,846 17	43,614,001	1767058
7	2,693,180 32	1,819,013 45	26,372 67	1,474,634 18	6,013,200 62	9,818,739	241,636
	52.77	18.94	1.32	26.95	.....	.....	.....

Cost per pupil: enrolled attendance: Rural Schools, $38.73; Cities, $61.01; Towns, $39.00; Villages, 29.47; Province, $46.80.

ROMAN CATHOLIC

I. TABLE F.—FINANCIAL

Rural Schools	Receipts				
	Legislative Grants	Municipal Grants and Assessments	Debentures	Balances, subscribed and other sources	Total amount received
	$ c.	$ c.	$ c.	$ c.	$ c.
1 Bruce	2,579 89	10,356 50	.....	8,032 39	20,968 78
2 Carleton	2,081 46	15,719 03	.....	9,323 25	27,123 74
3 Essex	8,491 73	33,286 91	.....	18,019 81	59,798 45
4 Frontenac	5,737 93	5,387 90	.....	5,473 89	16,599 72
5 Grey	1,985 36	5,999 23	.....	3,724 83	11,709 42
6 Hastings	4,333 54	3,415 85	.....	3,468 07	11,217 46
7 Huron	3,214 18	8,344 34	.....	4,595 04	16,153 56
8 Kent	2,265 92	10,355 94	.....	5,957 60	18,579 46
9 Lambton	166 96	2,514 67	.....	3,637 60	6,319 23
10 Lanark	1,592 73	2,422 77	.....	1,225 97	5,241 47
11 Leeds and Grenville	1,040 53	454 85	.....	936 21	2,431 59
12 Lennox and Addington	1,063 12	804 68	.....	717 88	2,585 68
13 Middlesex	654 27	4,280 41	.....	2,787 59	7,722 27
14 Norfolk	279 41	1,213 51	.....	766 87	2,259 79
15 Northumberland and Durham	3,648 04	2,919 19	.....	1,637 27	8,204 50
16 Ontario	187 36	1,106 86	.....	1,454 43	2,748 65
17 Peel	68 06	684 36	.....	715 67	1,468 09
18 Perth	5,330 74	10,741 99	4,000 00	6,967 69	27,040 42
19 Peterborough	1,237 40	3,249 27	.....	1,300 18	5,786 85
20 Prescott and Russell	2,216 60	76,501 37	5,597 74	38,312 70	122,628 41
21 Renfrew	16,093 45	13,451 38	2,543 25	10,555 75	42,643 83
22 Simcoe	815 96	7,301 55	.....	4,209 57	12,327 08
23 Stormont, Dundas & Glengarry	6,865 21	24,117 33	.....	12,820 38	43,802 92
24 Victoria	358 53	1,491 76	.....	388 03	2,238 32
25 Waterloo	2,326 27	7,569 15	.....	8,565 07	18,460 49
26 Wellington	1,063 24	5,045 62	.....	2,894 07	9,002 93
27 Districts	22,029 17	62,132 09	6,957 54	58,518 82	149,637 62
Totals	97,727 06	320,868 51	19,098 53	217,006 63	654,700 73
Cities					
1 Belleville	191 80	5,535 50	.....	1,183 63	6,910 93
2 Brantford	406 60	12,151 33	7,105 38	5,357 03	25,020 34
3 Chatham	286 56	14,106 89	.....	15,978 39	30,371 84
4 Fort William	1,237 79	30,377 42	.....	2,728 38	34,343 59
5 Galt	73 56	2,756 00	.....	194 84	3,024 40
6 Guelph	355 73	13,430 06	.....	131 28	13,917 07
7 Hamilton	2,377 40	67,441 67	.....	36,186 30	106,005 37
8 Kingston	550 68	21,089 34	.....	2,069 64	23,709 66
9 Kitchener	588 64	23,423 80	.....	24,429 46	48,441 90
10 London	1,021 12	37,223 33	.....	2,645 82	40,890 27
11 Niagara Falls	149 24	7,095 08	.....	1,791 11	9,035 43
12 Ottawa	.....	220,514 73	.....	2,085 69	222,600 42
13 Owen Sound	166 36	3,164 45	.....	622 52	3,953 33
14 Peterborough	826 52	21,387 09	.....	4,735 11	26,948 72
15 Port Arthur	662 84	16,287 06	.....	30,391 82	47,341 72
16 St. Catherines	336 61	17,481 04	.....	3,812 27	21,629 92
17 St. Thomas	214 81	8,259 72	.....	1,590 01	10,064 54
18 Sarnia	210 48	7,260 88	.....	5,966 64	13,438 00
19 Sault Ste. Marie	1,188 64	48,612 64	.....	57,746 45	107,547 73
20 Stratford	440 98	10,256 92	.....	1,245 88	11,943 78
21 Toronto	6,106 91	312,670 51	121,000 00	197,570 45	637,347 87
22 Windsor	1,015 52	73,617 78	.....	839 88	75,473 18
23 Woodstock	89 68	2,205 82	.....	465 75	2,761 25
Totals	18,498 47	976,349 06	128,105 38	399,768 35	1,522,721 26

SEPARATE SCHOOLS

STATEMENT, ETC.

	Expenditure					Value of school sites, buildings and furniture	Value of equipment
	Teachers' Salaries	Sites and building school houses	Libraries, maps, apparatus, prizes and school books	All other purposes	Total amount expended		
	$ c.	$ c.	$ c.	$ c.	$ c.	$	$
1	10,227 13	966 62	217 39	4,104 56	15,515 70	33,050	2,279
2	14,922 92	1,406 50	178 90	5,084 03	21,592 35	30,135	1,851
3	27,370 61	5,790 85	190 39	17,261 22	50,613 07	99,289	5,087
4	7,402 56	233 61	58 03	2,241 30	9,935 50	17,900	2,058
5	5,528 83	1,153 00	76 19	1,539 30	8,297 32	12,600	1,172
6	4,334 19	1,124 83	24 25	652 43	6,135 70	10,050	729
7	7,211 11	395 05	207 32	2,803 73	10,617 21	18,950	2,168
8	6,825 94	1,062 45	56 60	3,481 41	11,426 40	20,150	1,436
9	780 00	1,690 93	5 30	1,570 99	4,047 22	9,000	345
10	2,772 49	238 61	.....	1,183 59	4,194 69	7,200	550
11	886 92	3 96	.....	100 07	990 95	1,700	169
12	1,300 79	.....	.....	522 11	1,822 90	3,800	265
13	3,838 66	320 95	122 25	2,072 74	6,354 60	9,900	720
14	900 00	78 55	5 00	290 68	1,274 23	4,000	171
15	4,011 66	383 33	11 39	1,378 21	5,784 59	17,900	868
16	837 50	134 03	220 37	235 19	1,427 09	4,000	200
17	741 00	222 00	.....	134 52	1,097 52	2,200	300
18	9,003 76	7,609 71	224 38	6,955 79	23,793 64	33,700	2,551
19	2,487 31	265 32	67 55	1,874 98	4,695 16	16,500	1,250
20	55,265 70	12,104 72	881 27	18,984 87	87,236 56	183,490	7,374
21	16,247 99	4,116 25	329 86	8,190 88	28,884 98	60,230	4,561
22	4,733 95	758 60	34 55	3,473 07	9,000 17	34,100	1,313
23	17,423 69	1,295 19	308 86	14,143 39	33,171 13	76,634	5,003
24	1,549 02	10 50	10 97	223 80	1,794 29	4,500	325
25	9,320 71	751 61	154 07	1,905 78	12,132 17	26,250	1,565
26	4,997 14	270 85	3 25	1,563 33	6,834 57	11,200	965
27	50,567 19	38,828 31	1,441 07	35,475 81	126,312 38	132,685	4,125
	271,488 77	81,216 33	4,829 21	137,447 78	494,982 09	881,113	49,400
1	2,475 50	.....	.....	3,119 46	5,594 96	100,000	1,000
2	7,001 00	2,173 58	685 25	14,952 59	24,812 42	55,000	1,000
3	5,562 51	652 70	35 70	3,429 68	9,680 59	35,000	1,867
4	15,169 15	2,048 79	.....	17,125 65	34,343 59	242,000	345
5	2,230 00	174 13	28 45	591 82	3,024 40	9,800	240
6	6,412 38	69 25	523 73	6,837 94	13,843 30	75,000	1,000
7	33,742 65	6,713 62	3,007 65	52,151 94	95,615 86	832,000	8,000
8	8,664 46	2,769 43	172 56	8,411 89	20,018 34	70,000	2,500
9	11,149 71	26,507 23	226 00	8,649 85	46,532 79	80,000	2,000
10	16,824 86	5,714 00	2,618 25	12,502 18	37,659 29	142,000	5,000
11	4,217 75	.....	81 65	1,516 22	5,815 62	42,500	420
12	122,917 73	1,318 00	288 55	98,076 14	222,600 42	900,000	55,500
13	1,741 00	684 77	.....	1,280 65	3,706 42	10,000	418
14	15,299 78	.....	1,724 23	9,924 71	26,948 72	115,000	2,600
15	6,470 00	12,901 00	34 85	27,858 72	47,264 57	60,000	126
16	7,635 00	6,677 36	202 15	4,318 93	18,833 44	40,000	2,500
17	3,648 75	901 45	535 36	2,395 82	7,481 38	34,000	1,126
18	3,250 00	3,529 64	40 00	4,141 18	10,960 82	33,385	1,375
19	18,465 13	19,897 36	887 62	68,152 10	107,402 21	300,000	500
20	4,706 50	2,927 96	124 37	4,182 78	11,941 61	20,000	1,478
21	216,829 92	250,511 60	593 11	169,413 24	637,347 87	1,297,716	61,474
22	16,150 00	7,044 90	3,000 00	44,993 97	71,188 87	490,000	15,000
23	1,675 00	.....	.....	932 23	2,607 23	16,500	1,171
	532,238 78	353,216 77	14,809 48	564,959 69	1,465,224 72	4,999,901	166,640

ROMAN CATHOLIC

I. TABLE F.—FINANCIAL

Towns	Receipts				
	Legislative Grants	Municipal Grants and Assessments	Debentures	Balances, subscribed and other sources	Total amount received
	$ c.	$ c.	$ c.	$ c.	$ c.
1 Alexandria	281 64	7,745 79	.....	484 06	8,511 49
2 Almonte	99 52	1,392 29	.....	1,689 65	3,181 46
3 Amherstburg	496 73	3,645 47	.....	760 21	4,902 41
4 Arnprior	245 88	7,042 69	.....	3,313 02	10,601 59
5 Barrie	86 60	3,298 03	.....	216 34	3,600 97
6 Blind River	.....	4,489 45	.....	381 35	4,870 80
7 Bonfield	.....	1,429 53	.....	1,374 12	2,803 65
8 Brockville	213 04	5,701 47	.....	.....	5,914 51
9 Cache Bay	459 44	1,259 46	.....	265 03	1,983 93
10 Charlton	141 06	1,376 49	.....	227 12	1,744 67
11 Chelsmford	.....	2,648 11	.....	1,010 72	3,658 83
12 Cobalt	512 64	19,596 57	.....	13,333 65	33,442 86
13 Cobourg	137 36	3,800 00	.....	10 85	3,948 21
14 Cochrane	176 44	4,860 36	.....	1,308 33	6,345 13
15 Collingwood	84 93	3,345 12	.....	232 49	3,662 54
16 Cornwall	557 68	10,955 26	.....	1,209 58	12,722 52
17 Dundas	80 64	2,037 81	.....	64 79	2,183 24
18 Eastview	.....	8,721 00	.....	758 89	9,479 89
19 Ford	204 52	6,609 97	.....	3,000 00	9,814 49
20 Fort Frances	188 84	3,386 89	.....	1,916 06	5,491 79
21 Goderich	69 68	622 47	.....	472 60	1,164 75
22 Hanover	46 84	1,515 56	.....	417 65	1,980 05
23 Haileybury	293 24	7,667 12	.....	1,488 34	9,448 70
24 Hawkesbury	.....	14,883 09	.....	2,289 74	17,172 83
25 Ingersoll	114 52	2,458 29	.....	1,675 42	4,248 23
26 Kearney	259 99	726 97	.....	196 37	1,183 33
27 Keewatin	142 29	700 00	.....	163 61	1,005 90
28 Kenora	198 84	3,500 00	.....	2,575 11	6,273 95
29 Lindsay	227 96	7,795 49	.....	469 05	8,492 50
30 Little Current	287 25	500 00	.....	602 00	1,389 25
31 Massey	153 44	1,135 50	.....	421 66	1,710 60
32 Mattawa	1,647 24	4,426 48	.....	1,385 78	7,459 50
33 Merritton	190 24	2,202 78	.....	775 55	3,168 57
34 Mount Forest	63 68	1,091 68	.....	1,081 90	2,237 26
35 New Liskeard	151 43	900 00	.....	376 64	1,428 07
36 Newmarket	41 84	1,562 88	.....	1,075 87	2,680 59
37 North Bay	1,012 33	21,014 30	.....	156 55	22,183 18
38 Oakville	48 43	1,141 23	.....	322 03	1,511 69
39 Orillia	152 44	4,072 89	.....	3,067 15	7,292 48
40 Oshawa	105 52	3,519 62	.....	960 02	4,585 16
41 Paris	76 76	898 30	.....	5,717 12	6,692 18
42 Parkhill	50 84	753 12	.....	527 41	1,331 37
43 Pembroke	382 32	11,061 20	.....	1,490 23	12,933 75
44 Perth	144 36	2,403 40	.....	204 39	2,752 15
45 Picton	29 84	775 93	.....	732 15	1,537 92
46 Prescott	107 52	3,053 54	.....	5,163 96	8,325 02
47 Preston	149 36	5,394 01	.....	3,892 39	9,435 76
48 Rainy River	220 44	366 50	.....	458 53	1,045 47
49 Renfrew	287 96	10,331 09	.....	575 15	11,194 20
50 Rockland	.....	7,777 25	.....	.....	7,777 25
51 St. Mary's	54 68	1,431 19	.....	674 51	2,160 38
52 Sandwich	1,403 20	3,000 00	.....	9,686 91	14,090 11
53 Seaforth	78 52	1,512 42	.....	2,069 66	3,660 60
54 Smith's Falls	149 36	2,700 03	.....	2,913 98	5,763 37
55 Sturgeon Falls	295 43	7,043 15	.....	4,617 47	11,956 05
56 Sudbury	898 80	37,021 92	.....	5,304 06	43,224 78

SEPARATE SCHOOLS (Continued)

STATEMENT, ETC. (Continued)

	Expenditure					Value of school sites, buildings and furniture	Value of equipment
	Teachers' Salaries	Sites and building school houses	Libraries, maps, apparatus, prizes and school books	All other purposes	Total amount expended		
	$ c.	$ c.	$ c.	$ c.	$ c.	$	$
1	4,060 00	.....	.....	3,836 84	7,896 84	15,000	1,500
2	1,871 27	75 00	18 00	166 52	2,130 79	6,000	500
3	2,280 50	206 91	187 96	2,135 82	4,811 19	39,000	1,889
4	4,903 75	.....	.....	4,987 82	9,891 57	15,000	582
5	1,770 00	.....	33 58	1,333 50	3,137 08	10,500	746
6	2,400 00	.....	.....	1,046 37	3,446 37	25,000	200
7	1,182 20	192 85	23 63	107 75	1,506 43	3,000	73
8	2,400 00	924 00	.....	1,555 51	4,879 51	38,000	500
9	1,210 00	77 43	.....	447 75	1,735 18	4,000	65
10	711 75	272 00	173 17	326 64	1,483 56	2,000	500
11	1,885 00	310 05	10 40	979 78	3,185 23	8,000	300
12	10,609 50	1,838 34	.....	11,099 48	23,547 32	37,000	650
13	2,100 00	.....	.....	1,046 14	3,146 14	18,000	569
14	2,055 00	459 34	26 65	1,875 56	4,416 55	15,000	120
15	1,660 00	.....	445 12	1,557 42	3,662 54	21,500	460
16	8,741 00	.....	.....	3,829 92	12,570 92	35,000	1,000
17	1,278 00	6 05	5 00	494 89	1,783 94	5,000	275
18	4,835 00	241 73	112 43	3,957 50	9,146 66	50,000	122
19	3,500 00	3,530 00	250 64	2,520 00	9,800 64	12,000	500
20	1,998 50	.....	90 05	2,087 34	4,175 89	20,000	200
21	750 00	54 29	40 64	301 60	1,146 53	8,300	300
22	1,370 00	30 00	50 00	528 55	1,978 55	500	120
23	4,166 88	470 22	122 59	4,451 77	9,211 46	27,000	800
24	8,565 00	1,508 00	3,669 57	3,397 57	17,140 14	140,000	620
25	1,327 52	1,689 28	102 32	775 29	3,894 41	14,000	389
26	720 00	31 30	94 05	171 82	1,017 17	1,500	200
27	639 68	.....	11 50	229 45	880 63	3,000	40
28	1,984 10	.....	.....	976 25	2,960 35	30,000	181
29	5,200 00	222 78	14 50	2,423 55	7,860 83	40,000	400
30	836 00	.....	240 00	313 25	1,389 25	3,000	300
31	1,285 00	.....	.....	279 80	1,564 80	2,700	200
32	3,501 66	1,227 51	44 60	1,724 96	6,498 73	15,000	1,000
33	1,428 22	40 80	5 50	758 59	2,233 11	7,000	217
34	950 00	.....	.....	690 00	1,640 00	4,500	175
35	770 00	28 45	20 45	576 60	1,395 50	5,000	300
36	855 00	168 10	4 00	240 64	1,267 74	5,000	232
37	11,829 00	.....	56 00	9,135 41	21,020 41	50,000	2,000
38	720 00	263 89	.....	415 05	1,398 94	4,000	150
39	1,733 04	.....	122 39	1,524 07	3,379 50	20,000	1,500
40	1,997 18	541 53	.....	1,771 93	4,310 64	22,000	500
41	1,230 00	80 50	26 50	4,789 65	6,126 65	15,000	249
42	817 50	118 45	37 15	143 75	1,116 85	3,000	128
43	8,190 99	228 09	109 36	3,577 00	12,105 44	40,000	5,000
44	1,850 00	.....	45 36	634 25	2,529 61	8,000	500
45	633 75	25 50	.....	196 38	855 63	3,000	300
46	2,282 41	.....	.....	1,270 62	3,553 03	20,000	500
47	1,893 75	47 69	.....	5,049 24	6,990 68	32,000	900
48	815 87	.....	.....	54 97	870 84	5,000	100
49	3,800 00	990 00	157 22	5,099 84	10,047 06	50,000	1,000
50	5,200 00	425 00	450 00	1,702 25	7,777 25	20,000	2,000
51	1,000 00	150 00	25 00	576 02	1,751 02	2,500	175
52	3,800 00	6,327 87	143 18	3,819 06	14,090 11	15,000	192
53	1,227 50	364 95	.....	738 94	2,331 39	6,900	305
54	1,672 75	60 00	.....	3,802 25	5,535 00	50,000	1,200
55	5,420 00	1,727 80	289 80	2,457 41	9,895 01	20,000	292
56	16,993 55	400 00	3,027 33	17,444 62	37,865 50	104,000	3,000

ROMAN CATHOLIC

I.—TABLE F.—FINANCIAL

Towns	Receipts				
	Legislative Grants	Municipal Grants and Assessments	Debentures	Balances, subscribed and other sources	Total amount received
	$ c.	$ c.	$ c.	$ c.	$ c.
57 Thorold	252 88	5,528 69	.....	835 13	6,616 70
58 Tilbury	126 80	2,898 33	.....	1,960 30	4,985 43
59 Timmins	390 43	14,500 00	.....	2,713 17	17,603 60
60 Trenton	127 52	3,590 86	.....	828 64	4,547 02
61 Vankleek Hill	123 36	1,641 39	.....	646 38	2,411 13
62 Walkerton	119 52	2,580 05	.....	772 71	3,472 28
63 Walkerville	59 00	4,034 46	.....	2,089 79	6,183 25
64 Wallaceburg	202 36	4,200 00	.....	1,034 28	5,436 64
65 Waterloo	260 04	4,737 92	.....	400 00	5,397 96
66 Weston	55 28	1,357 97	.....	835 64	2,248 89
67 Whitby	45 84	723 81	.....	329 32	1,098 97
Totals	15,266 58	326,094 64	.....	108,002 58	449,363 80
Totals					
1 Rural Schools	97,727 06	320,868 51	19,098 53	217,006 63	654,700 73
2 Cities	18,498 47	976,349 06	128,105 38	399,768 35	1,522,721 26
3 Towns	15,266 58	326,094 64	.....	108,002 58	449,363 80
4 Villages	2,180 21	23,139 72	.....	15,204 01	40,523 94
5 Grand Totals, 1920	133,672 32	1646451 93	147,203 91	739,981 57	2,667,309 73
6 Grand Totals, 1919	99,046 61	1257991 84	426,996 79	519,312 41	2,303,347 65
7 Increases	34,625 71	388,460 09	.....	220,669 16	363,962 08
8 Decrease	.....	.....	279,792 88	.....	.....
9 Percentages	5.01	61.72	5.52	27.74	.....

SEPARATE SCHOOLS (Continued)

STATEMENT, ETC. (Concluded)

	Expenditure					Value of school sites, buildings and furniture	Value of equipment
	Teachers' Salaries	Sites and building school houses	Libraries, maps, apparatus, prizes and school books	All other purposes	Total amount expended		
	$ c.	$ c.	$ c.	$ c.	$ c.	$	$
57	3,927 50	496 09	58 58	1,982 22	6,464 39	28,500	1,513
58	2,230 00	327 30	29 90	544 94	3,132 14	9,000	300
59	5,907 47	1,246 59	65 23	8,430 76	15,650 05	39,000	1,000
60	1,250 00	.....	4 75	1,714 38	2,969 13	10,000	1,260
61	1,500 00	.....	.....	294 23	1,794 23	30,000	228
62	1,332 60	358 90	50 10	1,623 60	3,365 20	20,000	600
63	1,295 00	1,598 84	.....	1,614 06	4,507 90	29,000	1,000
64	1,743 76	205 45	.....	2,538 42	4,487 63	30,000	943
65	3,228 75	.....	125 00	1,743 63	5,097 38	20,000	3,400
66	786 08	76 83	.....	284 56	1,147 47	3,000	40
67	800 00	.....	10 58	194 14	1,004 72	3,500	150
	192,908 98	29,665 70	10,629 78	148,399 89	381,604 35	1,397,900	46,650
1	271,488 77	81,216 33	4,829 21	137,447 78	494,982 09	881,113	49,400
2	532,238 78	353,216 77	14,809 48	564,959 69	1,465,224 72	4,999,901	166,640
3	192,908 98	29,665 70	10,629 78	148,399 89	381,604 35	1,397,900	46,650
4	17,344 84	999 89	596 99	11,712 09	30,653 81	111,800	4,813
5	1,013,981 37	465,098 69	30,865 46	862,519 45	2,372,464 97	7,390,714	267,503
6	797,522 93	361,889 85	25,996 90	835,371 08	2,020,780 76	6,343,289	259,961
7	216,458 44	103,208 84	4,868 56	27,148 37	351,684 21	1,047,425	7,542
8	.....	.....	.....	.....	.....	.....	.....
9	42.74	19.60	1.30	36.35	.....	.....	.....

Cost per pupil, enrolled attendance: Rural Schools, $26.37; Cities, $39.65; Towns, $19.58; Villages, $18.27; Province, $30.85.

ROMAN CATHOLIC

II. TABLE G—TEACHERS, SALARIES, CERTIFICATES, ATTENDANCE,

Rural Schools	No. of Schools	Teachers														
		No. of Teachers	Male	Female	Av. salary, male	Av. salar female	No. who have ever attended a Model School in Ont.	No. who have ever attended a Normal School in Ont.	No. who have ever attended the Normal Coll. or F. in Ont.	Number of University Gr duates	1st Class or Interim 1st. Class	2nd Class or Interim 2nd Class	3rd Class	District	Kinder'ten-Primary
1 Bruce	8	12	1	11	$1,000	$1,064	.....	7	2	....	2	7	.....	.....	..
2 Carleton	21	26	..	26	.....	608	10	10	.....	.....	.....	10	6	1	..
3 Essex	28	41	..	41	.....	773	24	12	.....	.....	.....	12	21	2	..
4 Frontenac	11	11	1	10	1,000	772	2	8	.....	.....	.....	8	2	.....	..
5 Grey	7	7	..	7	.....	964	.....	6	1	....	1	6	.....	.....	..
6 Hastings	6	6	..	6	.....	604	2	4	.....	.....	.....	4	2	.....	..
7 Huron	8	10	..	10	.....	837	1	8	1	1	1	8	1	.....	..
8 Kent	8	9	1	8	800	1,037	4	5	.....	.....	.....	5	4	.....	..
9 Lambton	1	1	..	1	.....	900	.....	1	.....	.....	.....	1	.....	.....	..
10 Lanark	3	4	..	4	.....	512	.....	2	1	....	1	2	.....	.....	..
11 Leeds and Grenville	2	2	..	2	.....	580	.....	.....	.....	.....	.....	.....	.....	.....	..
12 Lennox and Addington	2	2	..	2	.....	668	1	1	.....	.....	.....	1	1	.....	..
13 Middlesex	5	5	..	5	.....	960	.....	4	1	....	1	4	.....	.....	..
14 Norfolk	1	1	..	1	.....	1,000	.....	1	.....	.....	.....	1	.....	.....	..
15 Northumberland and Durham	6	6	..	6	.....	750	.....	5	.....	.....	.....	5	.....	.....	..
16 Ontario	1	2	..	2	.....	925	.....	2	.....	.....	.....	2	.....	.....	..
17 Peel	1	1	..	1	.....	700	.....	1	.....	.....	.....	1	.....	.....	..
18 Perth	7	11	1	10	1,000	1,080	.....	6	5	1	5	6	.....	.....	..
19 Peterborough	3	3	..	3	.....	1,050	.....	3	.....	.....	.....	3	.....	.....	..
20 Prescott and Russell	96	129	3	126	600	454	86	4	.....	.....	.....	4	73	10	..
21 Renfrew	15	24	1	23	900	765	4	16	2	....	2	16	4	.....	..
22 Simcoe	4	8	..	8	.....	690	2	5	.....	.....	.....	5	1	.....	..
23 Stormont, Dundas and Glengarry	20	30	1	29	650	785	11	17	.....	1	3	14	10	1	..
24 Victoria	2	2	..	2	.....	1,350	.....	2	.....	.....	.....	2	.....	.....	..
25 Waterloo	7	12	1	11	1,200	868	.....	8	.....	.....	.....	8	.....	.....	..
26 Wellington	6	6	..	6	.....	942	.....	5	1	....	1	5	.....	.....	..
27 Districts	75	103	6	97	850	718	39	9	1	....	1	8	27	11	..
Totals	354	474	16	458	841	694	186	152	15	3	18	148	152	25	..
Cities															
1 Belleville	1	6	..	6	.....	458	2	5	.....	.....	.....	5	.....	.....	..
2 Brantford	2	13	..	13	.....	538	.....	7	3	....	3	7	.....	.....	..
3 Chatham	1	10	..	10	.....	567	.....	9	1	....	1	9	.....	.....	..
4 Fort William	5	22	..	22	.....	698	.....	20	.....	.....	.....	20	.....	1	..
5 Galt	1	3	..	3	.....	833	.....	3	.....	.....	.....	3	.....	.....	..
6 Guelph	3	12	..	12	.....	517	.....	7	.....	.....	.....	7	.....	.....	..
7 Hamilton	16	74	2	72	1,250	467	24	42	6	4	6	40	1	..	2
8 Kingston	3	18	1	17	1,500	500	.....	15	.....	.....	.....	15	.....	.....	..
9 Kitchener	2	22	..	22	.....	495	.....	15	5	1	5	15	.....	.....	..
10 London	9	31	4	27	900	425	1	25	5	....	5	24	.....	..	1
11 Niagara Falls	1	7	..	7	.....	786	.....	7	.....	.....	.....	7	.....	.....	..
12 Ottawa	33	229	45	184	1,200	600	209	86	3	5	5	60	126	6	..
13 Owen Sound	1	4	..	4	.....	400	.....	2	.....	.....	.....	2	.....	.....	..
14 Peterborough	3	29	..	29	.....	524	.....	25	3	1	3	25	.....	.....	..
15 Port Arthur	2	11	..	11	.....	723	1	10	.....	.....	.....	9	.....	1	..
16 St. Catharines	3	11	..	11	.....	800	2	8	.....	.....	.....	8	1	.....	..
17 St. Thomas	1	6	..	6	.....	492	2	4	.....	.....	.....	3	.....	.....	..
18 Sarnia	2	8	..	8	.....	375	2	6	.....	.....	.....	6	.....	.....	..
19 Sault Ste. Marie	6	28	..	28	.....	714	9	14	1	....	1	16	4	4	2
20 Stratford	1	9	..	9	.....	500	1	4	.....	.....	.....	4	1	.....	..
21 Toronto	32	223	25	198	1,093	955	23	171	15	5	15	167	3	..	4
22 Windsor	5	36	..	36	.....	514	2	29	1	....	1	29	3	.....	..
23 Woodstock	1	3	..	3	.....	550	.....	2	1	1	1	2	.....	.....	..
Total	134	815	77	738	1,155	668	278	516	44	17	46	483	139	12	10

SEPARATE SCHOOLS (Continued)

PUPILS IN THE VARIOUS BRANCHES OF INSTRUCTION, ETC.

Permanent Ungraded	Temporary	Number of Pupils	Boys	Girls	Average daily attendance	Percentage of average to total attendance	Kindergarten-Primary	First Reader, Part I, or Primer	First Reader, Part II or First Book	Second Book	Third Book	Fourth Book	Beyond 4th Book	Art
1 3	...	522	261	261	378	72	.....	81	67	110	140	120	4	522
2 ...	9	1,038	541	497	565	54	.....	413	183	198	135	101	8	906
3 3	3	1,885	1,000	885	1,134	60	.....	596	380	345	321	241	2	1,842
4 ...	1	255	143	112	131	51	.....	55	36	46	42	75	1	255
5 ...	...	197	97	100	101	51	.....	44	9	28	50	62	4	197
6 ...	...	143	70	73	86	60	.....	36	22	28	27	26	4	143
7 ...	...	308	160	148	203	66	.....	59	25	44	83	83	14	308
8 ...	...	369	174	195	224	61	.....	123	63	70	57	53	3	369
9 ...	...	47	22	25	32	68	.....	10	5	8	7	17	.....	47
10...	1	81	37	44	53	65	.....	14	12	14	19	16	6	81
11...	2	21	9	12	11	52	.....	6	1	4	5	5	.....	21
12...	...	35	20	15	13	37	.....	6	3	6	7	13	.....	35
13...	...	98	60	38	57	58	.....	15	3	16	30	34	.....	98
14...	...	50	22	28	30	60	.....	9	4	13	7	17	.....	50
15...	1	99	55	44	55	56	.....	19	15	13	24	28	.....	99
16...	...	71	32	39	46	65	.....	7	7	11	11	19	16	71
17...	...	20	11	9	10	50	.....	6	1	3	3	5	2	20
18...	...	429	198	231	286	67	.....	72	61	45	85	110	56	429
19...	...	134	75	59	81	60	.....	29	10	15	39	41	.....	134
20 2	40	5,620	2,782	2,838	3,520	63	221	2,356	1,000	924	671	387	61	4,593
21...	2	883	423	460	505	57	21	221	117	126	150	148	100	690
22...	2	377	182	195	224	59	.....	118	43	87	66	62	1	377
23 1	1	1,153	550	603	623	54	.....	397	150	143	166	154	143	1,104
24...	...	93	53	40	60	64	.....	10	11	17	22	33	.....	93
25 2	2	464	249	215	317	68	.....	77	61	82	145	98	1	464
26...	...	145	65	80	79	54	.....	33	17	23	30	40	2	145
27...	56	4,233	2,077	2,156	2,284	54	483	1,729	730	661	407	221	2	3,839
11	120	18,770	9,368	9,402	11,108	59.17	725	6,541	3,036	3,080	2,749	2,209	430	16,932
1 1	...	312	143	169	200	64	.....	51	59	52	58	92	.....	312
2 3	...	795	311	484	438	55	.....	291	156	86	136	126	.....	795
3 ...	...	410	221	189	303	74	.....	98	78	55	96	83	.....	410
4 1	...	1,341	690	651	921	69	.....	514	166	303	238	120	.....	1,341
5 ...	...	189	87	102	127	67	.....	50	30	42	53	14	.....	189
6 5	...	619	345	274	441	71	.....	131	83	141	143	121	.....	619
7 23	2	3,048	1,672	1,376	2,422	79	90	883	447	487	583	300	258	2,983
8 3	...	807	361	446	612	76	.....	133	113	121	238	202	.....	807
9 2	...	1,075	540	535	793	74	.....	198	129	200	284	242	22	1,075
10 1	...	1,263	623	640	904	72	63	254	192	247	236	182	89	1,237
11...	...	317	161	156	220	69	.....	87	47	50	79	54	.....	317
12 24	8	8,257	3,994	4,263	7,778	94	.....	2,162	1,576	1,648	1,500	936	435	8,257
13 2	...	167	94	73	121	72	.....	30	18	36	47	36	.....	167
14 1	...	1,324	623	701	874	66	.....	269	177	183	209	301	185	1,324
15 1	...	517	252	265	369	71	.....	186	60	120	90	61	.....	517
16 2	...	584	319	265	361	62	.....	129	89	124	122	120	.....	584
17 2	...	249	122	127	181	73	.....	56	39	39	65	50	.....	249
18 2	...	303	155	148	247	82	.....	100	41	49	56	57	.....	303
19...	1	1,537	769	768	853	55	327	318	193	307	210	182	.....	1,378
20 4	...	405	224	181	285	70	.....	84	52	89	85	95	.....	405
21 34	...	11,209	5,687	5,522	7,145	64	260	2,644	1,675	2,133	2,311	1,634	552	11,209
22 2	1	2,100	1,075	1,025	1,280	61	290	335	444	377	362	292	.....	2,100
23...	...	121	53	68	85	70	.....	26	19	25	31	20	.....	121
113	12	36,949	18,521	18,428	26,960	72.96	1,030	9,029	5,883	6,914	7,232	5,320	1,541	36,699

ROMAN CATHOLIC

II. TABLE G—TEACHERS, SALARIES, CERTIFICATES, ATTENDANCE,

Rural Schools	Geography	Music	Literature	Composition	Grammar	English History	Canadian History	Physiology and Hygiene	Nature Study	Physical Culture
1 Bruce	441	522	522	522	124	264	374	522	522	522
2 Carleton	732	863	749	779	157	152	564	849	812	982
3 Essex	1,318	1,847	1,401	1,595	850	308	725	1,306	1,412	1,842
4 Frontenac	255	255	255	255	80	119	138	255	255	255
5 Grey	153	197	197	197	66	166	144	197	197	197
6 Hastings	143	143	143	143	30	49	65	143	143	143
7 Huron	249	308	308	308	97	180	224	308	308	308
8 Kent	262	369	278	340	88	76	148	245	322	369
9 Lambton	47	47	47	47	17	17	24	47	47	47
10 Lanark	81	81	81	81	22	38	44	81	81	81
11 Leeds and Grenville	21	21	21	21	5	14	14	21	21	21
12 Lennox and Addington	35	35	35	35	13	14	21	35	35	35
13 Middlesex	96	98	98	98	34	60	75	98	98	98
14 Norfolk	50	50	50	50	17	17	24	50	50	50
15 Northumberland and Durham	99	99	99	99	28	37	52	99	99	99
16 Ontario	71	71	71	71	35	40	46	71	71	71
17 Peel	20	20	20	20	7	16	16	20	20	20
18 Perth	357	429	429	429	166	251	296	429	429	429
19 Peterborough	134	134	134	134	37	60	75	134	134	134
20 Prescott and Russell	3,469	3,894	2,313	3,975	816	790	2,574	3,557	2,989	4,534
21 Renfrew	668	818	746	825	301	343	438	751	724	789
22 Simcoe	377	377	377	377	77	114	145	377	377	377
23 Stormont, Dundas and Glengarry	852	1,058	949	935	357	482	569	667	747	1,126
24 Victoria	93	93	93	93	33	72	72	93	93	93
25 Waterloo	387	464	464	464	99	244	326	464	464	464
26 Wellington	112	145	145	145	42	72	95	145	145	145
27 Districts	3,385	3,348	3,656	3,637	472	704	2,383	3,711	3,657	4,048
Totals	13,907	15,786	13,681	15,675	4,070	4,699	9,671	14,675	14,252	17,279
Cities										
1 Belleville	312	312	312	312	118	118	161	312	312	312
2 Brantford	504	795	795	795	126	262	348	795	795	795
3 Chatham	410	410	410	410	83	179	234	410	410	410
4 Fort William	1,341	1,341	1,341	1,341	120	358	661	1,341	1,341	1,341
5 Galt	139	189	189	189	14	67	109	189	189	189
6 Guelph	488	619	619	619	121	264	405	619	619	619
7 Hamilton	2,983	3,048	3,048	3,048	493	1,076	1,076	2,790	2,790	3,048
8 Kingston	807	807	807	807	202	427	338	807	807	807
9 Kitchener	877	1,075	1,075	1,075	264	548	748	1,075	1,075	1,075
10 London	1,263	1,263	1,263	1,263	245	481	481	1,237	1,174	1,263
11 Niagara Falls	317	317	317	317	54	95	92	317	317	317
12 Ottawa	7,382	8,257	7,382	7,841	7,228	7,382	7,382	7,382	7,228	8,257
13 Owen Sound	137	167	167	167	36	83	119	167	167	167
14 Peterborough	1,324	1,324	1,324	1,324	676	785	917	1,324	1,324	1,324
15 Port Arthur	517	517	517	517	61	72	142	517	517	517
16 St. Catharines	584	584	584	584	163	242	242	584	584	584
17 St. Thomas	249	249	249	249	50	50	154	249	249	249
18 Sarnia	303	303	303	303	57	57	113	303	303	303
19 Sault Ste. Marie	910	800	1,218	1,297	162	508	757	952	952	952
20 Stratford	321	405	405	405	95	180	269	405	405	405
21 Toronto	11,209	11,209	11,209	11,209	2,186	2,186	2,186	11,209	11,209	11,209
22 Windsor	2,100	2,100	2,100	2,100	444	377	525	2,100	2,100	2,100
23 Woodstock	121	121	121	121	20	51	51	121	121	121
	34,598	36,212	35,755	36,293	13,018	15,848	17,510	35,205	34,988	36,364

SEPARATE SCHOOLS—(Continued)

PUPILS IN THE VARIOUS BRANCHES OF INSTRUCTION, ETC.—(Continued)

	Bookkeeping	Arithmetic and Mensuration	Algebra	Geometry	Latin	French (beyond 4th Book)	French (Primer to 4th Book, inclusive	Elementary Science	Commercial Subjects	Agriculture	Manual Training	Household Science	Maps, Globes Prizes: Number of Maps	Number of Globes	Number of Schls giving Prizes	Number of Trees planted on Arbor Day
1	.....	4	4	.....	4	.....	.....	3	1	192	41	129	116	11	3	14
2	12	8	3	.....	2	9	759	7	....	169	33	.....	194	25	4	18
3	.....	2	2	.....	.....	.....	1,494	2	....	64	99	.....	272	26	7	1
4	.....	.....	.....	.....	.....	.....	.....	.....	.....	61	.....	.....	96	11	7	2
5	.....	4	4	.....	.....	.....	.....	2	...	116	.....	43	88	7	4	6
6	.....	3	3	.....	2	2	.....	3	1	49	.....	.....	66	7	1	3
7	.....	14	14	5	4	.....	.....	14	9	125	19	67	101	12	5	.....
8	1	3	2	2	2	1	234	2	1	204	.....	.....	82	9	3	.....
9	.....	.....	.....	.....	.....	.....	.....	.....	.....	24	.....	.....	20	1	1	.....
10	.....	5	5	5	5	5	.....	.....	5	35	.....	.....	39	3	....	.....
11	.....	.....	.....	.....	.....	.....	.....	.....	.....	8	.....	.....	22	2	....	.....
12	.....	.....	.....	.....	.....	.....	.....	.....	.....	17	.....	.....	27	2	1	.....
13	.....	.....	.....	.....	.....	.....	.....	.....	.....	50	.....	.....	59	5	2	8
14	.....	.....	.....	.....	.....	.....	.....	.....	.....	50	.....	.....	10	1	....	.....
15	.....	.....	.....	.....	.....	.....	.....	.....	.....	54	.....	.....	53	6	4	6
16	16	16	.....	.....	.....	.....	.....	.....	16	30	.....	.....	10	1	....	.....
17	.....	2	2	2	2	2	.....	2	...	10	.....	.....	9	1	....	.....
18	.....	56	56	37	48	46	.....	56	2	205	115	134	88	7	1	12
19	.....	.....	.....	.....	.....	.....	.....	.....	.....	60	.....	.....	33	3	2	.....
20	52	61	1	1	....	61	5,520	38	....	72	385	13	621	85	29	69
21	.....	85	94	68	70	68	68	82	....	181	93	20	155	17	9	20
22	.....	.....	.....	.....	.....	.....	322	.....	.....	29	.....	.....	56	5	....	7
23	.....	110	143	122	69	86	552	.....	.....	307	35	.....	174	22	6	6
24	.....	.....	.....	.....	.....	.....	.....	.....	.....	65	.....	.....	23	2	2	.....
25	.....	1	1	.....	1	.....	.....	.....	1	179	199	280	110	9	3	2
26	.....	2	2	.....	.....	.....	.....	.....	2	46	5	20	74	8	3	.....
27	2	2	2	1	....	1	3,836	2	1	163	391	5	304	50	18	28
	83	378	338	243	209	281	12785	213	39	2,565	1,415	711	2,902	338	115	202
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	22	2	1	.....
2	.....	.....	.....	.....	.....	.....	.....	.....	.....	126	.....	.....	24	3	2	2
3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	25	3	.....	.....
4	.....	.....	.....	.....	.....	.....	.....	.....	.....	256	31	47	32	2	.....	.....
5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10	1	.....	.....
6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	34	35	5	3	.....
7	65	258	193	193	193	193	.....	193	65	140	.....	.....	220	72	12	.....
8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	40	10	.....	.....
8	.....	22	22	.....	22	.....	.....	22	22	357	.....	.....	42	4	2	.....
10	26	89	89	42	79	79	.....	79	26	537	.....	183	97	15	.....	.....
11	.....	.....	.....	.....	.....	.....	.....	.....	.....	133	.....	.....	10	2	1	.....
12	3,006	435	283	283	78	435	7,003	435	435	435	7,435	435	488	31	.....	33
13	.....	.....	.....	.....	.....	.....	.....	.....	.....	83	.....	.....	17	2	.....	.....
14	.....	125	185	111	185	185	.....	125	....	294	.....	64	61	7	3	.....
15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	14	16	14	3	.....	.....
16	.....	.....	.....	.....	.....	.....	.....	.....	.....	55	.....	.....	41	3	.....	.....
17	.....	.....	.....	.....	.....	.....	.....	.....	.....	115	.....	.....	16	2	1	.....
18	.....	.....	.....	.....	.....	.....	.....	.....	.....	38	.....	.....	16	3	2	.....
19	.....	.....	.....	.....	.....	.....	350	.....	.....	97	36	41	34	6	1	.....
20	.....	.....	.....	.....	.....	.....	.....	.....	.....	180	69	66	16	2	.....	.....
21	131	552	421	421	421	552	278	552	131	435	.....	360	316	47	.....	.....
22	.....	.....	.....	.....	.....	.....	247	.....	.....	54	.....	.....	78	10	5	.....
23	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	14	2	1	.....
	3,228	1,481	1,193	1,050	978	1,444	7,878	1,406	679	3,335	7,585	1,246	1,668	237	34	35

ROMAN CATHOLIC

II. TABLE G—TEACHERS, SALARIES, CERTIFICATES, ATTENDANCE,

Towns	No. of Schools	Teachers														
		No. of Teachers	Male	Female	Av. salary, male	Av. salary, female	No. who have ever attended a Model School in Ontario	No. who have ever attended a Normal School in Ontario	No. who have ever attended the Normal Coll. or F. of E. in Ontario	Number of University Graduates	1st Class or Interim 1st Class	2nd Class or Interim 2nd Class	3rd Class	District	Kinder'ten-Primary
					$	$									
1 Alexandria	2	12		12		383	1	3			1	3	1		
2 Almonte	1	3		3		600	1	2				2			
3 Amherstburg	2	8		8		262	4	4				4			
4 Arnprior	1	9		9		550	2	7				7			
5 Barrie	1	3		3		650		1				1			
6 Blind River	1	6		6		400	3						2	1	
7 Bonfield	1	2		2		625	1						1		
8 Brockvill	1	8		8		462		7				7			
9 Cache Bay	1	2		2		650	2						2		
10 Charlton	1	1		1		1,000		1				1			
11 Chelmsford	1	4		4		500	1	1				1		1	
12 Cobalt	2	12		12		656	1	5				5	1		
13 Cobourg	1	4		4		525		4				4			
14 Cochrane	1	6		6		475									
15 Collingwood	1	2		2		950		2				2			
16 Cornwall	4	19	5	14	540	450	7	8	1			7	3	1	
17 Dundas	1	3		3		433	2	1				1			
18 Eastview	1	11	1	10	850	445	6						2		
19 Ford	2	9		9		350	1	6				6	1		
20 Fort Frances	1	4		4		500							1		
21 Goderich	1	2		2		375		1				1			
22 Hanover	1	2		2		850		2				2			
23 Haileybury	1	6		6		783		3				3	1		
24 Hawkesbury	3	28	9	19	450	237	5	1		1		1	2	2	
25 Ingersoll	2	3		3		433	1	2				2			
26 Kearney	1	1		1		750		1				1			
27 Keewatin	1	1		1		750	1							1	
28 Kenora	1	5		5		400	3						2	1	
29 Lindsay	2	7	1	6	1,600	600		7				7			
30 Little Current	1	1		1		1,000		1				1			
31 Massey	1	2		2		700	2						2		
32 Mattawa	1	6		6		533	5	1				1	3		
33 Merritton	1	2		2		850		2				2			
34 Mount Forest	1	2		2		475		1				1			
35 New Liskeard	1	2		2		400									
36 Newmarket	1	1		1		900		1				1			
37 North Bay	3	18		18		561		14				14			
38 Oakville	1	1		1		900			1		1				
39 Orillia	1	4		4		500		3				3			
40 Oshawa	1	4		4		600		1				1			
41 Paris	1	2		2		600	1	1				1			
42 Parkhill	1	1		1		850		1				1			
43 Pembroke	1	13		13		683	3	9	1		1	9	1		
44 Perth	1	4		4		462		4				4			
45 Picton	1	1		1		800		1				1			
46 Prescott	1	4		4		562	1	2				2			
47 Preston	1	5		5		400	1	1	1		1	1	1		
48 Rainy River	1	1		1		900		1				1			
49 Renfrew	1	9		9		422	4	4				4	1		
50 Rockland	2	17		17		308	10						6	4	
51 St. Mary's	1	2		2		500		1				1			
52 Sandwich	4	9		9		567	3	6				6	3		
53 Seaforth	1	2		2		600		1	1	1	1	1			
54 Smith's Falls	1	5		5		460		4				4			
55 Sturgeon Falls	1	13		13		490	10						9	1	
56 Sudbury	5	23		23		783	11	10				10	9	2	

SEPARATE SCHOOLS (Continued)

PUPILS IN THE VARIOUS BRANCHES OF INSTRUCTION, ETC. (Continued)

Permanent	Ungraded	Temporary	Number of Pupils	Boys	Girls	Average daily attendance	Percentage of average to total attendance	Kindergarten-Primary	First Reader, Part 1, or Primer	First Reader, Part II or First Book	Second Book	Third Book	Fourth Book	Beyond 4th Book	Art
1	4	3	587	250	337	418	71	.....	162	56	111	148	110	.....	587
2	1	...	129	59	70	79	61	.....	15	21	16	37	22	18	129
3	4	...	383	148	235	245	64	.....	104	51	60	87	65	16	383
4	2	...	484	237	247	325	67	.....	165	47	89	113	70	.....	484
5	2	...	131	74	57	88	67	.....	28	16	22	26	39	.....	131
6	...	3	316	147	169	243	77	.....	185	46	33	32	20	.....	316
7	...	1	112	56	56	53	47	30	28	9	9	20	16	.....	112
8	1	...	273	121	152	220	81	.....	56	42	56	59	60	.....	273
9	...	...	157	77	80	84	54	70	40	13	17	10	7	.....	157
10	...	...	56	25	31	28	50	.....	17	12	12	8	7	.....	56
11	...	2	191	81	110	120	63	.....	73	47	18	27	22	4	191
12	...	6	618	334	284	363	59	.....	172	218	98	85	45	.....	618
13	...	...	152	80	72	101	66	.....	44	20	23	35	30	.....	152
14	...	6	259	131	128	172	66	59	44	73	44	36	3	.....	259
15	...	...	97	52	45	60	62	.....	32	16	9	18	22	.....	97
16	4	4	1,084	510	574	776	72	.....	371	215	256	159	83	.....	1,084
17	2	...	126	62	64	101	80	.....	37	9	21	33	26	.....	126
18	...	9	627	254	373	421	67	.....	360	100	110	36	21	.....	627
19	1	1	615	296	319	392	64	.....	227	106	129	114	39	.....	615
20	...	3	181	87	94	121	67	10	27	30	48	34	32	.....	181
21	1	...	84	46	38	63	75	.....	14	11	13	21	25	.....	84
22	...	...	95	51	44	70	74	.....	17	23	9	30	16	.....	95
23	...	2	348	223	125	179	51	.....	13	56	70	52	36	.....	.....
24	...	23	1,207	551	656	959	79	.....	402	308	290	148	36	23	849
25	1	...	118	56	62	105	89	.....	35	17	18	26	22	.....	118
26	...	...	38	19	19	26	68	.....	4	4	8	17	5	.....	38
27	...	...	38	18	20	22	58	.....	25	2	3	7	1	.....	38
28	...	2	236	120	116	150	64	44	44	24	49	47	28	.....	192
29	...	...	342	166	176	239	70	.....	68	45	70	70	89	.....	342
30	...	...	52	24	28	33	63	10	13	9	5	7	8	.....	52
31	...	...	76	35	41	49	64	.....	29	6	13	19	9	.....	76
32	2	...	293	132	161	167	57	.....	77	45	45	64	52	10	293
33	...	...	78	43	35	44	56	.....	22	12	11	17	16	.....	78
34	1	...	78	34	44	54	69	.....	17	8	14	17	22	.....	78
35	2	...	67	42	25	20	30	.....	28	13	13	7	6	.....	67
36	...	...	83	47	36	51	61	.....	25	11	14	20	13	.....	83
37	...	4	1,026	463	563	676	66	.....	337	165	176	179	169	.....	1,026
38	...	...	46	22	24	24	52	.....	14	3	12	7	10	.....	46
39	1	...	184	88	96	127	59	.....	40	34	43	34	33	.....	184
40	3	...	230	124	106	135	59	.....	81	24	47	44	34	.....	230
41	1	...	61	32	29	51	84	.....	24	7	10	11	9	.....	61
42	...	...	25	13	12	14	56	.....	3	4	8	3	7	.....	25
43	2	...	688	359	329	408	59	.....	177	106	105	204	96	.....	688
44	...	...	198	92	106	140	71	.....	30	22	42	47	57	.....	198
45	...	...	30	11	19	22	73	.....	7	3	6	5	9	.....	30
46	1	1	143	85	58	102	71	.....	30	19	37	26	31	.....	143
47	2	...	262	133	129	189	72	.....	55	54	40	56	57	.....	262
48	...	...	52	22	30	36	69	8	19	12	8	.....	5	.....	52
49	3	1	486	246	240	351	72	.....	72	90	122	99	103	.....	486
50	2	5	859	401	458	637	74	.....	254	180	202	172	51	.....	859
51	1	...	58	26	32	37	64	.....	10	14	6	12	16	.....	58
52	...	...	432	235	197	251	58	.....	140	72	102	50	68	.....	432
53	...	...	90	56	34	69	77	.....	24	11	10	21	24	.....	90
54	1	...	263	122	141	179	68	.....	59	48	47	55	54	.....	263
55	...	3	642	335	307	413	64	154	170	81	104	77	56	.....	642
56	2	...	1,100	540	560	854	78	.....	215	261	272	258	94	.....	1,100

ROMAN CATHOLIC

II. TABLE G—TEACHERS, SALARIES, CERTIFICATES, ATTENDANCE,

Towns	Geography	Music	Literature	Composition	Grammar	English History	Canadian History	Physiology and Hygiene	Nature Study	Physical Culture
1 Alexandria	587	587	587	587	110	258	258	587	587	587
2 Almonte	114	129	129	129	35	17	72	114	129	129
3 Amherstburg	383	383	383	383	81	81	168	367	367	383
4 Arnprior	319	484	484	484	70	183	272	484	484	484
5 Barrie	103	131	131	131	39	65	87	131	131	131
6 Blind River	316	316	316	316	20	20	85	316	316	316
7 Bonfield	54	112	54	112	16	16	54	112	42	112
8 Brockville	273	273	273	273	60	119	119	273	273	273
9 Cache Bay	75	157	157	157	7	7	157	157	157	157
10 Charlton	56	56	56	7	7	56	56	56	56	56
11 Chelmsford	191	191	191	191	26	26	118	191	191	191
12 Cobalt	509	618	509	618	45	265	302	618	618	618
13 Cobourg	152	152	152	152	30	65	65	152	152	152
14 Cochrane	200	259	200	200	39	83	83	259	259	259
15 Collingwood	65	97	97	97	22	40	49	97	97	97
16 Cornwall	1,084	1,084	1,084	1,084	83	1,084	713	1,084	1,084	1,084
17 Dundas	126	126	126	126	26	59	80	126	126	126
18 Eastview	627	627	627	627	44	44	627	627	627	627
19 Ford	388	615	615	615	153	153	282	282	615	615
20 Fort Frances	114	114	114	114	32	66	66	181	181	181
21 Goderich	70	84	84	84	25	46	59	84	84	84
22 Hanover	78	95	95	95	16	46	55	95	95	95
23 Haileybury	328	348	328	328	36	46	204	348	348	348
24 Hawkesbury	1,207	1,207	914	1,207	59	119	694	914	849	1,207
25 Ingersoll	118	118	118	118	22	48	48	118	118	118
26 Kearney	38	38	30	22	22	22	20	30	36	38
27 Keewatin	13	38	13	13	7	7	4	38	38	38
28 Kenora	148	148	148	148	28	124	124	192	192	192
29 Lindsay	342	342	342	342	89	89	229	342	342	342
30 Little Current	20	52	52	29	8	8	20	52	52	52
31 Massey	76	76	76	76	9	9	76	76	76	76
32 Mattawa	293	293	293	293	62	62	72	293	293	293
33 Merritton	78	78	78	78	16	33	44	78	78	78
34 Mount Forest	61	78	78	78	22	39	53	78	78	78
35 New Liskeard	67	67	67	67	25	67	67	67	67	67
36 Newmarket	58	83	83	83	13	33	47	83	83	83
37 North Bay	689	1,026	1,026	1,026	169	348	348	1,026	1,026	1,026
38 Oakville	46	46	46	46	17	17	17	46	46	46
39 Orillia	184	184	184	184	67	33	67	184	184	184
40 Oshawa	230	230	230	230	78	34	125	230	230	230
41 Paris	61	61	61	61	9	20	20	61	61	61
42 Parkhill	22	25	25	25	7	10	18	25	25	25
43 Pembroke	688	688	511	511	96	54	96	688	688	688
44 Perth	198	198	198	198	57	57	104	198	198	198
45 Picton	30	30	30	30	9	9	14	30	30	30
46 Prescott	143	143	143	143	31	31	143	143	143	143
47 Preston	207	262	262	262	57	113	153	262	262	262
48 Rainy River	13	52	13	13	5	5	5	52	52	52
49 Renfrew	486	486	486	486	103	120	289	486	486	486
50 Rockland	859	859	859	859	223	51	859	859	859	859
51 St. Mary's	48	58	58	58	16	28	34	58	58	58
52 Sandwich	432	432	432	432	68	68	432	432	432	432
53 Seaforth	66	90	90	90	24	45	55	90	90	90
54 Smith's Falls	263	263	263	263	54	54	156	263	263	263
55 Sturgeon Falls	238	642	238	642	56	56	238	238	642	642
56 Sudbury	1,100	1,100	1,100	1,100	94	94	352	1,100	1,100	1,100

SEPARATE SCHOOLS (Continued)

PUPILS IN THE VARIOUS BRANCHES OF INSTRUCTION, ETC. (Continued)

	Bookkeeping	Arithmetic and Mensuration	Algebra	Geometry	Latin	French(beyond 4th Book)	French (Primer to 4th Book, inclusive	Elementary Science	Commercial Subjects	Agriculture	Manual Training	Household Science	Maps, Globes and Prizes: Number of Maps	Number of Globes	Number of Schools giving Prizes	Number of Trees planted on Arbor Day
1													15	2		
2		18	18		18	18		18					12	1		
3	9	16	16	4	12	12	220	12	9	135			25	1	2	
4	76												22	2		
5													33	3		
6							255						24	2	1	
7							111						11	1		
8													35	4	1	
9							157						7	2		
10										15			7	1	1	
11		4				4	187	4		118	118	118	23	2	1	
12							366						37	5	1	
13													16	1		
14							227						12	1		
15										40	40	40	22	2	1	
16							403						50	4	1	12
17													9	2	1	
18							627						18	2	1	
19							403			83			12	2	1	
20													12	2	1	
21													14	2	1	
22											49		6	1	1	
23							173						12	2		
24		23				23	1,207	23					46	2		
25										27			10	1		
26													8	1		5
27							8						5	1		
28							110						12	1	1	
29													22	2	1	
30										52			10	2	1	7
31							42			9	9		5	1	1	
32	10	10	10	10			52						16	1		
33													11	1		
34										39	39		16	1	1	
35							140						4	1		
36													9	1		
37							343				337		24	2		
38													4	1		
39										46			16	2		
40													10	1		
41										30			9	1	1	
42										10			12	2		
43													23	2	1	
44													14	1	1	
45													8	2		
46													16	2		
47													10	1	1	
48							44						2	1	1	
49							390				486		13	1	1	
50							859				859		12	6		
51													12	1		
52							314						16	2		
53													12	1	1	
54											48	61	10	2		
55							531						25	3		
56							731						35	6	2	4

ROMAN CATHOLIC

II. TABLE G—TEACHERS, SALARIES, CERTIFICATES, ATTENDANCE,

Towns	Teachers														
	No. of Schools	No. of Teachers	Male	Female	Av. salary male	Av. salary female	No. who have ever attended a Model School in Ontario	No. who have ever attended a Normal School in Ontario	No. who have ever attended the Normal Coll. or F. of E.	Number of University Graduates	1st Class or Interim 1st Class	2nd Class or Interim 2nd Class	3rd Class.	District.	Kinder'ten- Primary
57 Thorold	2	6	....	6	$...	$700	2	3	1	....	1	3	.....	.....	...
58 Tilbury	1	5	....	5	.....	410	.....	2	.....	....	....	2	.....	2	...
59 Timmins	1	9	....	9	.....	728	4	1	.....	....	....	1	3	....	...
60 Trenton	1	4	....	4	.....	437	.....	4	.....	....	....	4	.....	.....	...
61 Vankleek Hill	1	5	....	5	.....	300	2	.....	.....	....	....	.....	.....	1	...
62 Walkerton	1	4	....	4	.....	525	1	.....	.....	1	....	.....	1	....	...
63 Walkerville	1	4	....	4	.....	350	1	3	.....	....	....	3	.....	.....	...
64 Wa laceburg	1	6	....	6	.....	292	1	3	.....	....	....	3	.....	.....	...
65 Waterloo	1	6	....	6	.....	525	.....	1	.....	....	....	1	.....	.....	...
66 Weston	1	1	....	1	.....	1,000	.....	1	.....	....	....	1	.....	.....	...
67 Whitby	1	1	....	1	.....	800	.....	1	.....	....	....	1	.....	.....	...
Totals	89	388	16	372	575	517	104	158	6	3	6	157	58	17	...
1 Rural Schools	354	474	16	458	841	694	186	152	15	3	18	148	152	25	...
2 Cities	134	815	77	738	1,155	668	278	516	44	17	46	483	139	12	10
3 Towns	89	388	16	372	575	517	104	158	6	3	6	157	58	17	...
4 Villages	17	39	....	39	.....	523	11	16	3	1	3	16	6	....	...
5 Gd. Totals, 1920	594	1,716	109	1,607	1,027	637	579	842	68	24	73	804	355	54	10
6 Gd. Totals, 1919	559	1,586	95	1,491	767	497	422	765	67	15	69	752	289	46	12
7 Increases	35	130	14	116	260	140	157	77	1	9	4	52	66	8	...
8 Decreases	...	.....	....	.....	.....	.....	.....	.....	.....	....	....	.....	.....	....	2
9 Percentages	...	.....	6.35	93.64	.....	.....	33.74	49.06	3.96	1.39	4.25	46.85	20.69	3.14	.58

SEPARATE SCHOOLS (Continued)

PUPILS IN THE VARIOUS BRANCHES OF INSTRUCTION, ETC. (Continued)

Permanent	Ungraded	Temporary	Number of Pupils	Boys	Girls	Average daily attendance	Percentage of average to total attendance	Kindergarten Primary	First Reader, Part I, or Primer	First Reader, Part II or First Book	Second Book	Third Book	Fourth Book	Beyond 4th Book	Art
57	2	.....	423	217	206	268	63	.....	155	67	71	63	67	.....	423
58	...	1	264	115	149	179	68	.....	105	35	44	46	34	.....	264
59	...	5	480	243	237	271	56	111	86	130	83	46	24	.....	480
60	...	.....	254	135	119	161	63	.....	80	48	30	54	42	.....	254
61	3	1	200	78	122	142	71	.....	70	24	39	32	35	.....	200
62	3	.....	193	114	79	141	73	.....	32	27	42	44	48	.....	193
63	...	1	217	116	101	135	62	48	35	20	42	45	27	.....	217
64	1	2	332	165	167	222	67	.....	115	66	49	55	47	.....	332
65	5	.....	290	129	161	197	68	.....	46	50	77	67	50	.....	290
66	...	.....	98	49	49	50	51	.....	40	14	17	15	12	.....	98
67	...	.....	48	20	28	40	83	.....	18	6	6	8	10	.....	48
	61	89	19,485	9,474	10,011	13,162	67.54	544	5,684	3,438	3,725	3,521	2,502	71	18,735
1	11	120	18,770	9,368	9,402	11,108	59.17	725	6,541	3,036	3,080	2,749	2,209	430	16,932
2	113	12	36,949	18,521	18,428	26,960	72.96	1,030	9,029	5,883	6,914	7,232	5,320	1,541	36,699
3	61	89	19,485	9,474	10,011	13,162	67.54	544	5,684	3,438	3,725	3,521	2,502	71	18,735
4	10	4	1,677	846	831	1,140	67.97	.....	451	235	301	313	331	46	1,677
5	195	225	76,881	38,209	38,672	52,370	68.11	2,299	21705	12592	14020	13815	10362	2,088	74,043
6	185	233	74,833	37,132	37,701	49,289	65.86	1,758	20686	12901	14232	13300	10282	1,674	71,677
7	10	.....	2,048	1,077	971	3,081	2.25	541	1,019	.....	.....	515	80	414	2,366
8	...	8	.....	.....	.....	.....	.....	.....	.....	309	212	.....	.....	.....	.....
9	11.3	13.11	.....	49.69	50.30	68.11	.....	2.99	28.23	16.38	18.23	17.97	13.47	2.71	96.30

ROMAN CATHOLIC

II. TABLE G—TEACHERS, SALARIES, CERTIFICATES, ATTENDANCE

Towns	Geography	Music	Literature	Composition	Grammar	English History	Canadian History	Physiology and Hygiene	Nature Study	Physical Culture
57 Thorold	423	423	423	423	67	67	130	423	423	423
58 Tilbury	200	264	200	200	34	34	80	200	200	264
59 Timmins	369	480	369	369	70	70	283	480	480	480
60 Trenton	254	254	254	254	42	96	96	254	254	254
61 Vankleek Hill	200	200	200	200	200	67	200	200	200	200
62 Walkerton	161	193	193	193	48	92	134	193	193	193
63 Walkerville	217	217	217	217	27	27	114	217	217	217
64 Wallaceburg	332	332	332	332	47	102	151	332	332	332
65 Waterloo	244	290	290	290	50	117	194	290	290	290
66 Weston	98	98	98	98	12	12	58	98	98	98
67 Whitby	48	48	48	48	10	24	24	48	48	48
Totals	17,280	19,330	17,963	18,747	3,251	5,460	10,518	18,308	18,931	19,441
Totals										
1 Rural Schools	13,907	15,786	13,681	15,675	4,070	4,699	9,671	14,675	14,252	17,279
2 Cities	34,598	36,212	35,755	36,293	13,018	15,848	17,510	35,205	34,988	36,364
3 Towns	17,280	19,330	17,963	18,747	3,251	5,460	10,518	18,308	18,931	19,441
4 Villages	1,558	1,621	1,402	1,601	408	558	970	1,677	1,640	1,586
5 Grand Totals, 1920	67,343	72,949	68,801	72,316	20,747	26,565	38,669	69,865	69,811	74,670
6 Grand Totals, 1919	67,175	70,666	66,326	70,089	24,583	23,835	41,461	69,550	68,009	71,760
7 Increases	168	2,283	2,475	2,227	.....	2,730	.....	315	1,802	2,910
8 Decreases	.....	.....	.....	.....	3,836	.....	2,792	.....	.....	.....
9 Percentages	87.59	94.88	89.49	94.06	26.98	34.55	50.29	90.87	90.80	97.12

SEPARATE SCHOOLS (Concluded)

PUPILS IN THE VARIOUS BRANCHES OF INSTRUCTION, ETC. (Concluded)

	Bookkeeping	Arithmetic and Mensuration	Algebra	Geometry	Latin	French (beyond 4th Book)	French (Primer to 4th Book, inclusive)	Elementary Science	Commercial Subjects	Agriculture	Manual Training	Household Science	Maps, Globes, Prizes: Number of Maps	Maps, Globes, Prizes: Number of Globes	Maps, Globes, Prizes: Number of Schools giving Prizes	Number of Trees planted on Arbor Day
57	.....	.....	.....	.....	.....	.....	.....	.....	.....	63	.....	.....	12	1	.....	.....
58	.....	.....	.....	.....	.....	.....	254	.....	.....	34	.....	.....	8	3	1	.....
59	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	21	2	1	.....
60	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	17	1	1	.....
61	.....	.....	.....	.....	.....	.....	198	.....	.....	.....	.....	.....	10	1	.....	.....
62	.....	.....	.....	.....	.....	.....	.....	.....	.....	92	.....	.....	12	4	1	.....
63	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12	1	1	.....
64	.....	.....	.....	.....	.....	.....	.....	.....	.....	55	.....	.....	8	1	1	.....
65	.....	.....	.....	.....	.....	.....	.....	.....	.....	117	.....	.....	15	1	1	.....
66	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9	1	1	.....
67	.....	.....	.....	.....	.....	.....	.....	.....	.....	18	.....	.....	10	1	.....	.....
	95	71	44	14	30	57	8,352	57	9	983	1,985	219	1,025	120	37	32
1	83	378	338	243	209	281	12785	213	39	2,565	1,415	711	2,902	338	115	202
2	3,228	1,481	1,193	1,050	978	1,444	7,878	1,406	679	3,335	7,585	1,246	1,668	237	34	35
3	95	71	44	14	30	57	8,352	57	9	983	1,985	219	1,025	120	37	32
4	.....	46	46	23	44	33	617	56	12	110	129	.....	183	22	7	4
5	3,406	1,976	1,621	1,330	1261	1,815	29632	1,732	739	6,993	11114	2,176	5,778	717	193	273
6	983	1,613	1,448	1,234	1226	1,172	25418	1,018	370	6,315	3,673	1,296	5,401	675	189	221
7	2,423	363	173	96	35	643	4,214	714	369	678	7,441	880	377	42	4	52
8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
9	4.43	2.57	2.10	1.72	1.64	2.36	38.54	2.25	.96	9.09	14.45	2.83	9.72*	1.2*	32.49	.....

*To each school.

CONTINUATION

I. TABLE H—FINAN-

Continuation Schools	Receipts						Teachers' Salaries
	Legislative Grants	Municipal Grants (county)	Municipal Grants (local)	School Fees	Balances and other sources	Total Receipts	
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
1 *Aberfoyle	.....	.....	464 89	5 00	589 62	1,059 51	400 00
2 Acton	878 00	878 00	2,061 31	290 00	61 11	4,168 42	2,920 00
3 Agincourt	401 96	401 96	1,550 00	174 00	710 09	3,238 01	1,462 25
4 *Ailsa Craig	.....	.....	1,400 00	113 00	18 00	1,531 00	720 00
5 Alvinston	765 65	1,557 70	768 20	301 00	.....	3,392 55	2,377 95
6 Arkona	380 60	530 60	325 00	122 00	20 86	1,379 06	1,206 19
7 Ayr	756 05	777 60	1,640 62	303 50	801 06	4,278 83	2,425 00
8 Bancroft	3,381 05	1,257 15	.....	.....	109 27	4,747 47	2,797 50
9 Bath	673 48	973 48	525 00	130 00	507 08	2,809 04	1,990 00
10 Beaverton	824 43	1,624 43	842 92	508 00	57 10	3,856 88	2,434 00
11 Beeton	760 20	965 75	1,650 00	284 00	1,012 80	4,672 75	2,480 00
12 Belmont	896 25	2,100 74	1,101 25	526 00	59 26	4,683 50	2,729 09
13 Blenheim	815 35	1,215 35	1,450 00	224 50	609 66	4,314 86	2,610 41
14 Blind River	1,498 58	.....	1,488 82	173 00	4 00	3,164 40	2,360 00
15 Blyth	573 45	1,146 90	30 50	380 70	106 78	2,238 33	1,400 00
16 *Bolton	.....	1,958 06	11 69	.....	29 32	1,999 07	560 00
17 Bothwell	737 25	1,137 25	1,125 00	105 50	220 57	3,325 57	2,327 50
18 Bowesville	301 58	501 58	600 00	12 50	178 77	1,594 43	1,050 00
19 Bridgeburg	995 25	1,045 25	4,728 48	599 00	35 60	7,403 58	3,960 71
20 Bruce Mines	1,700 62	.....	2,954 92	108 00	106 91	4,870 45	2,595 00
21 Brussels	877 10	1,754 20	1,300 00	531 50	1,517 67	5,980 47	2,830 00
22 Burk's Falls	1,491 96	.....	1,208 98	286 00	8 17	2,995 11	2,340 00
23 Cannington	790 76	1,590 76	1,500 00	599 50	455 79	4,936 81	2,360 00
24 Cardinal	637 44	1,037 44	620 28	329 50	119 96	2,744 62	2,160 00
25 Carp	788 36	888 36	1,200 00	495 50	734 45	4,106 67	2,487 72
26 Chapleau	1,709 60	.....	1,700 00	424 50	1,782 90	5,617 00	3,141 00
27 Claremont	729 48	1,529 48	500 00	388 00	75 73	3,222 69	2,400 00
28 Clifford	739 55	939 55	1,000 00	194 00	144 77	3,017 87	2,120 00
29 Cochrane	790 50	.....	806 60	.....	.....	1,597 10	1,556 50
30 Coldwater	814 00	1,008 30	1,300 00	304 00	50 17	3,476 47	2,670 00
31 Comber	649 75	849 75	1,500 00	221 00	1,318 19	4,538 69	2,319 50
32 Cookstown	794 65	1,000 65	1,195 00	313 50	109 66	3,413 46	2,400 00
33 Creemore	797 70	998 70	1,465 68	363 00	54 99	3,680 07	2,500 00
34 Delaware	682 75	1,443 60	1,629 18	467 00	6,758 71	10,981 24	2,200 00
35 Delhi	401 60	551 60	426 67	94 00	5 00	1,478 87	1,320 00
36 Drayton	2,180 50	1,096 20	1,860 14	772 50	73 00	5,982 34	4,050 00
37 Dresden	770 45	1,020 45	1,300 00	260 00	367 24	3,718 14	2,507 50
38 Drumbo	558 45	558 45	2,178 04	84 50	275 89	3,655 33	1,785 80
39 Dryden	1,624 50	.....	2,107 08	.....	.....	3,731 58	2,520 00
40 Eganville	713 35	988 35	1,176 90	116 00	1,083 97	4,078 57	2,186 60
41 Eganville, (R. C. Sep. School.)	589 42	929 42	600 00	114 00	726 77	2,959 61	1,500 00
42 Elmira	891 35	1,008 85	1,648 52	558 00	157 33	4,264 05	3,276 91
43 Elmvale	769 10	769 10	2,333 33	218 00	548 96	4,638 49	2,290 00
44 Ennismore	659 25	659 25	500 00	430 00	59 69	2,308 19	1,962 00
45 Erin	547 80	747 80	1,746 00	190 50	16 00	3,248 10	1,740 00
46 Espanola	792 44	.....	.....	.....	1,665 60	2,458 04	1,330 00
47 Fenelon Falls	829 74	829 74	1,804 69	143 00	51 20	3,658 37	2,370 00
48 Feversham	.....	.....	558 55	36 00	.....	594 55	429 00
49 Finch	798 56	1,197 84	2,100 00	369 00	1,111 34	5,576 74	2,487 86
50 Fingal	774 65	1,936 63	500 00	85 00	560 19	3,856 47	2,400 00
51 Frankford	658 03	858 03	1,100 00	.....	509 39	3,125 45	2,285 00
52 Gore Bay	1,512 94	.....	1,172 03	347 25	67 00	3,099 22	2,515 00
53 Grand Valley	860 60	1,520 60	740 65	399 47	437 42	3,958 74	2,300 00
54 Hanover	908 65	1,362 97	2,841 41	416 50	207 55	5,737 08	3,457 03
55 Harrow	734 30	934 30	1,005 30	139 00	42 20	2,855 10	2,300 00
56 Havelock	868 00	868 00	1,569 18	79 00	56 80	3,440 98	2,806 88

* Opened in September

SCHOOLS

CIAL STATEMENT

	Expenditure					
	Buildings, Sites, and all permanent improvements	Repairs to school accomodations	Library, scientific apparatus, maps, etc., typewriters, drawing models and equipment for physical culture	School books, stationery, fuel, examinations and other expenses	Total Expenditure	Charges per year for Tuition
	$ c.	$ c.	$ c.	$ c.	$ c.	
1	456 03	.....	177 64	21 90	1,055 57	Res. free ; non-res. $5.
2	75 00	234 24	105 53	817 05	4,151 82	Res. $5; non-res.$7.
3	319 99	109 00	91 00	452 72	2,434 96	$10.
4	141 75	196 48	334 53	94 83	1,487 59	$10.
5	.....	.....	.....	1,014 60	3,392 55	$10.
6	.....	.....	54 18	96 85	1,357 22	$10.
7	42 70	143 88	25 56	526 78	3,163 92	$10.
8	180 29	.....	.....	1,007 04	3,984 83	Free.
9	.....	10 00	84 07	385 00	2,469 07	Res. free; non-res. $10.
10	307 55	81 95	365 82	666 41	3,855 73	$10.
11	.....	164 65	.....	699 73	3,344 38	Res. 1st yr. free; all others $10.
12	841 75	.....	.....	1,067 04	4,637 88	$10.
13	532 08	25 00	72 49	1,074 88	4,314 86	Res. free; non-res. $25.
14	.....	43 00	175 40	586 00	3,164 40	$10.
15	.....	10 00	212 25	602 92	2,225 17	$10.
16	350 00	329 61	90 00	621 27	1,950 88	Res. free; non-res. $20.
17	.....	12 67	37 65	580 98	2,958 80	Res. free; non-res. $20.
18	65 45	.....	33 50	238 10	1,387 05	$5.
19	1,200 00	201 42	303 61	1,737 84	7,403 58	Res. free; non-r. F. I $30;II&III$20.
20	.....	96 88	220 92	1,676 02	4,588 82	Res. free; non-r. $10.
21	.....	23 40	35 58	781 87	3,670 85	Res.I $5, II $7.50; all others $10.
22	46 41	13 15	36 73	558 82	2,995 11	$10.
23	.....	.....	234 53	376 12	2,970 65	$15.
24	175 00	.....	.....	409 62	2,744 62	$10.
25	.....	.....	262 65	518 91	3,269 28	Res.$5;Tp.outside sec.$20;others $25
26	508 50	.....	.....	1,551 22	5,200 72	Res free; non-res. I $10, II $15,III $20
27	30 00	28 20	140 53	623 96	3,222 69	Res. F. I free; all others $10.
28	.....	.....	.....	751 57	2,871 57	$10.
29	.....	.....	25 00	15 60	1,597 10	Free.
30	.....	20 28	50 00	464 79	3,205 07	$10.
31	28 55	.....	.....	58 83	2,406 88	$20.
32	67 84	.....	163 42	711 30	3,342 56	$7.50.
33	131 10	.....	78 95	970 02	3,680 07	$10.
34	5,110 93	80 15	61 07	709 50	8,161 65	$10.
35	.....	34 73	38 94	85 20	1,478 87	Res. free; non-res. $10.
36	40 87	47 95	448 00	1,395 52	5,982 34	Res. I free; all others $10.
37	.....	.....	68 00	1,142 64	3,718 14	Res. I&II fr.,III $2.50;non-r. $10.
38	142 50	.....	40 36	503 39	2,472 05	$5.
39	38 98	90 40	530 36	551 84	3,731 58	Free.
40	.....	.....	110 61	597 08	2,894 29	Res. free; non-res. $10.
41	84 75	20 45	.....	419 45	2,024 65	Res. free; non-res. $10.
42	12 50	9 59	4 00	961 05	4,264 05	$10.
43	174 81	31 50	216 35	991 49	3,704 15	Res. $5; non-res. $10.
44	25 00	.....	17 20	253 19	2,257 39	$20.
45	85 00	200 00	65 00	450 86	2,540 86	F. I res. fr; non-r. $5; F. II&III $9.
46	.....	.....	13 20	322 40	1,665 60	Free.
47	74 00	216 30	.....	998 07	3,658 37	Res. free; non-res. $10.
48	63 34	.....	.....	102 21	594 55	$8.
49	107 50	52 68	.....	2,928 70	5,576 74	$10.
50	280 75	16 44	92 82	855 36	3,645 37	Res. free; non-res. $10.
51	40 60	22 20	17 64	747 25	3,112 69	Free.
52	.....	.....	198 22	386 00	3,099 22	$10.
53	.....	100 00	90 90	1,467 84	3,958 74	Res. I free; all others $10.
54	.....	46 13	76 88	2,057 84	5,637 88	Res. I free; all others $10.
55	.....	15 10	88 62	451 38	2,855 10	Res. free; non-res. $10.
56	105 00	48 10	76 00	405 00	3,440 98	Res. I fr., II&III $3; non-res. I $3, II&III $6.

CONTINUATION

I. TABLE H—FINAN-

Continuation Schools	Receipts						Teachers' Salaries
	Legislative Grants	Municipal Grants (county)	Municipal Grants (local)	School Fees	Balances and other sources	Total Receipts	
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
57 Hepworth	317 00	1,542 50	2,265 67	136 75	415 46	4,677 38	979 84
58 Highgate	862 60	1,262 60	3,233 00	250 50	801 30	6,410 00	2,754 70
59 Huntsville	1,803 88	.....	3,600 59	256 50	127 97	5,788 94	4,771 73
60 Jarvis	448 85	648 85	421 05	87 75	1 00	1,607 50	1,340 00
61 Jockvale	341 48	441 48	900 00	15 25	137 81	1,836 02	1,450 00
62 Kars	654 24	754 24	1,167 37	59 50	.....	2,635 35	2,140 00
63 Keewatin	1,748 40	.....	2,984 36	.....	4 08	4,736 84	3,170 00
64 Kenmore	786 80	886 55	1,000 00	473 50	117 40	3,264 25	2,371 40
65 Kinburn	534 78	534 78	612 72	232 00	389 99	2,304 27	1,604 70
66 Lakefield	829 32	829 32	2,105 51	.....	174 25	3,938 40	2,535 00
67 Lanark	706 62	747 80	1,400 00	270 00	1,434 33	4,558 75	2,181 00
68 Lansdowne	389 76	789 76	2,022 38	43 50	825 38	4,070 78	1,600 00
69 Lion's Head	330 15	1,575 37	.....	66 00	6 13	1,977 65	1,000 00
70 Little Current	751 96	.....	862 00	86 00	.....	1,699 96	1,212 00
71*Lobo	.....	.....	2,000 00	.....	1,000 00	3,000 00	880 00
72 Lucknow	838 10	2,095 00	1,250 00	369 00	226 80	4,778 90	2,445 00
73 Malakoff	506 56	813 81	1,275 00	40 00	125 95	2,761 32	1,649 97
74 Manitowaning	728 70	.....	425 00	200 00	116 54	1,470 24	1,230 00
75 Manitock	384 79	267 26	1,346 10	64 32	334 93	2,397 40	1,280 00
76 Marmora	1,000 00	2,000 00	1,000 00	272 00	5,258 38	9,530 38	1,280 00
77 Massey	846 42	.....	920 58	80 00	.....	1,847 00	1,200 00
78 Maxville	703 95	1,055 93	1,325 00	210 50	140 31	3,435 69	2,240 00
79 Melbourne	708 15	1,041 16	1,134 64	282 00	80 88	3,246 83	2,247 75
80 Merlin	700 60	1,100 60	1,000 00	395 50	52 19	3,248 89	2,392 87
81 Merrickville	672 80	1,072 80	1,297 47	173 60	207 50	3,424 17	2,200 00
82 Metcalfe	698 39	898 39	1,000 00	215 00	81 84	2,893 62	2,280 00
83 Millbrook	811 58	1,755 74	1,540 00	.....	284 80	4,392 12	2,550 00
84 Milverton	810 25	1,412 68	845 35	311 50	.....	3,379 78	2,910 00
85*Mimico	.....	.....	1,124 92	147 00	24 00	1,295 92	960 00
86 Minden	500 00	.....	118 00	1 00	96 43	715 43	480 00
87*Morriston	.....	.....	412 76	66 00	350 49	829 25	402 01
88 Mount Albert	797 02	797 02	942 48	274 00	17 00	2,827 52	2,380 00
89 Mount Brydges	706 00	706 00	10,361 60	278 70	76 45	12,128 75	2,469 00
90 Navan	520 56	720 56	1,458 82	99 00	1,957 29	4,756 23	1,737 98
91 New Hamburg	878 20	878 20	1,900 60	243 00	120 00	4,020 00	2,720 00
92 New Liskeard	1,935 04	.....	3,400 00	155 02	249 07	5,739 13	3,080 00
93†New Toronto	636 32	.....	.....	.....	.....	636 32	636 32
94 North Augusta	781 47	1,181 47	675 00	165 00	59 58	2,862 52	2,430 00
95 North Gower	695 42	795 42	2,000 00	85 00	545 64	4,121 48	2,060 00
96 Norwich	789 70	789 70	2,578 11	494 00	50 34	4,701 85	2,680 00
97 Odessa	677 88	.....	1,771 65	97 20	2,960 99	5,507 63	2,100 00
98 Oil Springs	729 55	979 55	1,475 72	253 70	.....	3,438 52	2,287 55
99 Orono	688 19	892 54	1,768 60	.....	990 05	4,339 38	2,155 78
100 Paisley	847 70	2,119 25	285 95	460 75	83 75	3,797 40	2,438 25
101 Papenham	792 08	792 08	1,359 67	403 00	2,388 14	5,734 97	2,456 00
102 Palmerston	833 15	1,010 00	1,103 00	92 00	.....	3,038 15	2,520 00
103 Plattsville	767 35	917 35	1,000 00	267 00	12 26	2,963 96	2,370 00
104 Port Burwell	807 35	2,018 38	900 00	.....	1,011 74	4,737 47	2,440 00
105 Port Colborne	890 55	990 55	5,036 00	.....	185 44	7,102 54	5,135 22
106 Port Credit	873 55	873 55	3,500 00	321 00	1,515 59	7,083 69	2,812 50
107 Powassan	781 08	.....	700 00	223 00	331 17	2,035 25	1,250 00

* Opened in September
† Closed in June; no report received

SCHOOLS (Continued)

CIAL STATEMENT (Continued)

	Expenditure					Charges per year for Tuition
	Buildings, Sites, and all permanent improvements	Repairs to school accommodations	Library, scientific apparatus, maps, etc., typewriters, drawing models and equipment for physical culture	School books, stationery, fuel, examinations and other expenses	Total Expenditure	
	$ c.	$ c.	$ c.	$ c.	$ c.	
57	1,944 77	.....	22 80	1,181 36	4,128 77	$10.
58	800 00	.....	.....	469 89	4,024 59	Res. I free, II & III $7.50; non-res. I $5, II & III $10.
59	150 00	49 87	180 00	608 25	5,759 85	Res. I free, II $5, III $10; non-res. $10
60	25 00	50 00	65 00	127 50	1,607 50	Res. free; non. res. $7.50.
61	20 52	.....	67 58	291 09	1,829 19	Res. free; non-res. II $5.
62	.....	.....	111 92	383 43	2,635 35	Res. free; non-res. $10.
63	.....	123 60	501 38	941 86	4,736 84	Free.
64	.....	.....	.....	826 41	3,197 81	$12.50.
65	470 42	.....	9 15	220 00	2,304 27	Res. free; non-res. $20.
66	204 00	110 00	196 00	893 40	3,938 40	Free.
67	.....	49 79	133 51	436 53	2,800 83	Res. free; non res. $10.
68	309 58	.....	.....	355 09	2,264 67	Res. free; non-res. $10.
69	.....	.....	187 19	649 00	1,836 19	$10.
70	154 40	.....	75 52	258 04	1,699 96	Res. free; non-res. $20.
71	125 50	.....	296 78	32 75	1,335 03	Res. free.
72	150 00	390 00	120 00	850 00	3,955 00	Res. I $7.50, II $10, III $12.50; non-res. $10, $12.50, $15.
73	18 00	.....	215 22	355 89	2,239 08	Res. free; non-res. $10.
74	.....	.....	56 83	113 11	1,399 94	$10.
75	187 38	99 56	42 53	463 77	2,073 24	Res. free; non-res. $10.
76	6,919 17	.....	768 52	443 41	9,411 10	$10.
77	.....	.....	6 75	292 19	1,498 94	Res. free; non-res. $15.
78	188 06	.....	.....	170 00	2,598 06	Free from Sept. 1st, 1920.
79	12 84	31 82	77 02	697 71	3,067 14	Res. free; non-res. $10.
80	193 96	55 60	276 52	136 45	3,055 40	$10.
81	.....	24 80	157 87	541 50	2,924 17	Res. free; non-res. $10.
82	50 25	.....	77 95	291 16	2,699 36	$10.
83	92 72	80 00	167 72	739 90	3,630 34	Free.
84	.....	.....	264 88	140 00	3,314 88	Res. I $5; all others $10.
85	.....	.....	335 92	.....	1,295 92	Res. free; non-res. $15.
86	.....	202 32	.....	33 11	715 43	$10.
87	49 25	40 69	122 36	205 44	819 75	$12.
88	.....	.....	120 28	327 24	2,827 52	$10.
89	1,653 26	.....	397 63	6,845 21	11,365 10	Res. $5; non-res. $15.
90	300 00	.....	66 60	461 94	2,566 52	Res. free; non-res. $10.
91	500 00	100 00	100 00	600 00	4,020 00	Res. free; non-res. $15.
92	.....	29 75	23 65	1,886 27	5,019 67	Res. free; non-res. $15.
93	.....	.....	.....	.....	636 32	Res. I free; all others $10.
94	.....	.....	.....	409 61	2,839 61	Res. free; all others $10.
95	162 65	93 00	203 30	882 53	3,401 48	Res. free; non-res. $10.
96	.....	210 00	250 00	1,353 06	4,493 06	Res. $3; non-res. $12.
97	.....	94 20	100 41	919 69	3,214 30	Res. free; non-res. $10.
98	80 23	7 00	.....	1,063 74	3,438 52	Res. $5; non-res. $10.
99	66 11	11 99	113 16	614 84	2,961 88	Free.
100	96 00	23 00	115 35	1,124 80	3,797 40	Fs. I & II $7.50, III $12.50.
101	175 34	73 35	170 69	667 35	3,542 73	$10.
102	.....	65 84	48 64	403 67	3,038 15	Res. free; non-res. $5.
103	.....	.....	106 23	417 07	2,893 30	Res. $6; non-res. $12.
104	45 83	.....	289 60	296 44	3,071 87	Res. free; non-res. $5.
105	704 20	236 00	.....	876 09	6,951 51	Free.
106	200 00	100 00	24 34	623 00	3,759 84	Res. I free, II $9, III $15; non-res. $15, $21, $24.
107	.....	.....	56 82	270 00	1,576 82	Res. $10; non-res. $15.

CONTINUATION

I. TABLE H. FINAN-

Continuation Schools	Receipts						Teachers' Salaries
	Legislative Grants	Municipal Grants (county)	Municipal Grants (local)	School Fees	Balances and other sources	Total Receipts	
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
108 Princeton	520 55	520 55	2,681 50	9 00	1,305 49	5,037 09	2,150 00
109 Richard's Landing	822 84	.....	700 00	84 50	1,198 96	2,806 30	1,080 00
110 Richmond	.....	100 00	1,128 75	316 00	27 00	1,571 75	1,080 00
111 Ridgeway	883 00	945 30	1,500 00	.....	1,132 59	4,460 89	3,100 00
112 Ripley	765 80	1,914 50	2,500 00	599 50	784 02	6,563 82	2,274 98
113 Rodney	860 05	2,150 12	88 34	28 00	521 19	3,647 70	2,650 00
114 Russell	769 11	969 11	500 00	.....	2,106 76	4,344 98	2,420 00
115 St. George	870 00	1,270 00	1,855 00	224 20	352 34	4,571 54	3,239 50
116 Schomberg	358 23	358 23	600 00	101 00	709 05	2,126 51	1,060 00
117 Scotland	659 15	1,059 15	1,554 43	224 50	1,764 63	5,261 86	2,091 27
118 Southampton	823 85	2,059 62	2,007 27	298 08	312 57	5,501 39	2,827 50
119 South Mountain	644 24	966 36	1,850 00	100 15	1,594 39	5,155 14	2,147 89
120 South Porcupine	871 24	.....	.....	.....	1,025 92	1,897 16	1,310 00
121 Spencerville	659 58	1,059 58	975 00	278 00	536 35	3,508 51	2,022 13
122 Springfield	821 75	2,054 38	334 85	84 00	667 11	3,962 09	2,590 00
123 Stayner	854 25	1,078 96	1,000 00	565 50	1,272 91	4,771 62	2,740 00
124 Stella	1,140 97	840 97	600 00	385 00	1,255 99	4,222 93	1,870 00
125 Stouffville	834 61	834 61	789 57	595 00	.....	3,053 79	2,532 00
126 Sturgeon Falls	926 68	.....	2,500 00	209 00	913 28	4,548 96	2,040 00
127 Sutton	711 89	711 89	1,500 00	407 25	697 89	4,028 92	2,338 50
128 Tamworth	780 46	174 20	779 80	414 00	2,549 80	4,698 26	2,660 00
129 Tara	801 30	2,003 25	251 73	319 00	39 60	3,414 88	2,610 00
130 Tavistock	808 00	808 00	1,223 40	213 50	1,028 06	4,080 96	2,580 00
131 Teeswater	816 50	1,918 25	500 00	623 00	1,067 72	4,925 47	2,362 63
132 Thamesville	716 95	1,116 95	1,200 00	182 00	477 17	3,693 07	2,071 07
133 Thessalon	1,820 70	.....	1,272 58	200 00	.....	3,293 28	2,770 00
134 Thornbury	776 50	1,164 75	1,387 92	428 50	89 20	3,846 87	2,590 00
135 Thorndale	744 00	744 00	2,017 23	469 00	594 66	4,568 89	2,355 00
136 Tilbury	695 20	1,095 20	1,608 55	262 50	30 16	3,691 61	2,660 00
137 Timmins	884 92	.....	2,000 00	168 00	.....	3,052 92	2,400 00
138 Tottenham	742 45	942 07	800 00	513 50	280 27	3,278 29	2,500 00
139 Warkworth	802 47	803 47	1,265 40	530 00	62 43	3,463 77	2,410 00
140*Webbwood	623 60	.....	.....	.....	.....	623 60	623 60
141 Westboro	837 50	100 00	2,842 06	105 00	.....	3,884 56	2,885 00
142 West Lorne	731 45	1,828 62	.....	505 15	.....	3,065 22	2,400 00
143 Westmeath	422 34	607 34	600 00	67 00	.....	1,696 68	1,196 23
144 Westport	621 76	1,561 01	652 21	6 00	15 07	2,856 05	2,398 52
145 Westport (R. C. Sep. School)	435 96	435 96	1,000 00	7 50	503 74	2,383 16	1,353 32
146 Winona	403 85	603 85	710 17	.....	510 52	2,228 39	1,146 66
147 Wroxeter	694 40	1,388 80	1,098 11	215 50	39 70	3,436 51	2,060 00
Totals, 1920	113879 42	125127 46	199593 26	32,582 29	77,228 74	548,411 17	317,602 27
Totals, 1919	70,355 75	84,726 04	174381 46	29,468 14	79,960 12	438,891 51	253,653 52
2 Increases	43,523 67	40,401 42	25,211 80	3,114 15	.....	109,519 66	63,948 75
4 Decreases	.....	.....	.....	.....	2,731 38	.....	.....
Percentages	20.76	22.82	36.39	5.94	14.08	.....	67.13

*Closed in June; no report received.

SCHOOLS (Continued)

CIAL STATEMENT (Concluded)

	Expenditure					Charges per year for Tuition
	Buildings, Sites, and all permanent improvements	Repairs to school accomodations	Library, scientific apparatus, maps, etc., typewriters, drawing models and equipment for physical culture	School books, stationery, fuel, examinations and other expenses	Total Expenditure	
	$ c.	$ c.	$ c.	$ c.	$ c.	
108	172 49	55 19	254 33	655 28	3,287 29	Res. free; non-res. $4.50.
109	178 66	.....	219 69	86 25	1,564 60	Res. $7.50; non-res. $15.
110	179 10	.....	101 38	211 27	1,571 75	Res. $20; non-res. $25.
111	.....	9 98	12 43	228 76	3,351 17	Free.
112	1,424 00	35 10	15 95	790 11	4,540 14	Res. $8; non-res. $10.
113	.....	404 10	176 21	417 39	3,647 70	Res. and Co. free; others $10.
114	8 00	.....	135 36	374 85	2,938 21	Free.
115	876 42	.....	.....	356 64	4,472 56	Res. free; non-res. $25.
116	.....	.....	109 34	957 17	2,126 51	Res. I free; others $10; non-res. I $5, others $10.
117	305 81	.....	117 75	582 60	3,097 43	Res. $10; non-res. $15.
118	612 40	280 05	207 31	667 61	4,594 87	$8.
119	1,150 78	.....	931 43	629 44	4,859 54	Res. free; non-res free from Sept. 1st.
120	15 00	.....	.....	318 54	1,643 54	Free.
120	93 00	.....	89 62	462 83	2,667 58	$10.
122	55 86	.....	.....	693 12	3,338 98	$10.
123	.....	33 69	55 78	775 11	3,604 58	Res. $5; non-res. $10.
124	320 80	.....	419 59	325 21	2,935 60	$35.
125	.....	.....	165 32	356 47	3,053 79	$15.
126	.....	246 32	495 47	1,625 66	4,407 45	$10.
127	52 27	.....	118 87	653 59	3,163 23	$10.
128	.....	350 00	152 90	985 16	4,148 06	Res. free; non-res. $12.
129	114 75	.....	45 73	644 40	3,414 88	$10.
130	.....	.....	135 05	691 46	3,406 51	Res. $5; non-res. $10.
131	99 70	69 98	125 00	935 62	3,592 93	$11.
132	.....	36 25	.....	680 13	2,787 45	Res. free; non-res. $10.
133	.....	22 25	44 74	456 29	3,293 28	Res. free; non-res. $20.
134	.....	40 00	267 00	949 87	3,846 87	Res. free; non-res. $10.
135	309 00	48 90	.....	686 75	3,399 65	$10.
136	121 96	100 00	86 56	347 09	3,315 61	$10.
137	.....	.....	31 10	.....	2,431 10	Res. free; non-res. $6.
138	178 53	.....	107 59	482 59	3,268 71	$10.
139	.....	17 75	105 60	930 42	3,463 77	Lower Sch. $12; Middle $15.
140	.....	.....	.....	.....	623 60	Free.
141	200 00	73 56	.....	726 00	3,884 56	Res. free; non-res. $20.
142	.....	.....	175 79	436 95	3,012 74	Free.
142	369 41	.....	.....	131 04	1,696 68	Res. I free; all others $10.
144	.....	24 36	89 89	343 28	2,856 05	Res. free; non-res. $5.
145	.....	15 00	40 00	420 00	1,828 32	Res. free; non-res. $5.
146	.....	401 05	.....	348 86	1,896 57	Free.
147	.....	92 00	11 00	694 21	2,857 21	I $5; II $7.50; III $10.
1	34,773 90	7,483 24	17,433 11	95,792 66	473,085 18	64 free; 83 not free.
2	50,544 96	4,145 01	12,545 92	67,811 20	388,700 61	58 free; 80 not free.
3	.....	3,338 23	4,887 19	27,981 46	84,384 57	6 free; 3 not free.
4	15,771 06	.....	.....	.....	.....	.....
5	7.35	1.58	3.68	20.25	.....	.....

Cost per pupil, enrolled attendance, $81.24; average attendance, $98.76.

CONTINUATION

II. TABLE I—SCHOOLS UNDER PUBLIC SCHOOL

Continuation Schools	Schools under Public or Separate School Board	Value of General Equipment									
		Library	Scientific Apparatus	Charts, maps and Globes	Art Models	Typewriters	Biological Specimens	Equipment for Physical Culture	Gymnasium, not including equipment	Museum	Aquarium or Herbarium
		$	$	$	$	$	$	$	$	$	$
1 Aberfoyle	....	.....	99	10	18	....	36	.....	.....	...	....
2 Acton	1	325	452	36	35	....	38	12	.....	...	....
3 Agincourt	1	161	355	109	39	....	74	12	.....	...	....
4 Ailsa Craig	1	68	221	.....	26	....	20	.....	.....	...	....
5 Alvinston	1	308	417	91	34	....	42	22	.....	...	....
6 Arkona	1	176	173	15	26	....	26	9	.....	...	....
7 Ayr	....	298	428	62	49	....	32	.....	.....	...	....
8 Bancroft	1	246	291	70	28	....	36	.....	.....	...	....
9 Bath	1	213	275	61	27	....	36	.....	.....	...	....
10 Beaverton	1	233	521	73	48	....	92	47	.....	...	....
11 Beeton	1	253	443	52	34	....	40	.....	.....	...	....
12 Belmont	1	313	581	38	29	....	34	.....	.....	...	....
13 Blenheim	1	457	510	71	51	....	32	16	.....	...	....
14 Blind River	1	288	338	54	39	....	54	59	.....	...	....
15 Blyth	1	200	338	78	36	....	22	.....	.....	...	6
16 Bolton	1	192	114	60	20	....	11	20	.....	...	....
17 Bothwell	1	262	417	28	29	....	30	.....	.....	...	....
18 Bowesville	1	184	129	40	36	....	23	.....	.....	...	....
19 Bridgeburg	1	479	1,135	84	69	70	138	20	.....	...	....
20 Bruce Mines	1	170	461	65	42	....	31	.....	.....	...	....
21 Brussels	1	376	325	87	46	....	44	9	.....	...	....
22 Burk's Falls	1	279	369	101	54	....	76	46	.....	...	....
23 Cannington	1	236	544	34	54	....	41	76	.....	...	7
24 Cardinal	1	292	300	69	60	....	66	.....	.....	...	....
25 Carp	1	371	340	72	40	....	54	.....	.....	...	....
26 Chapleau	....	200	398	29	49	....	40	10	.....	...	....
27 Claremont	1	312	398	68	39	....	68	20	.....	...	....
28 Clifford	1	353	297	74	46	100	43	17	.....	...	....
29 Cochrane	1	180	160	6	59	....	45	.....	.....	...	....
30 Coldwater	1	309	385	56	39	....	49	.....	.....	...	....
31 Comber	1	210	289	63	44	....	20	10	.....	...	....
32 Cookstown	1	343	456	31	70	....	30	9	.....	...	....
33 Creemore	1	230	352	20	62	....	59	.....	.....	...	....
34 Delaware	1	219	211	61	40	....	39	13	.....	...	....
35 Delhi	1	197	258	67	49	....	43	.....	.....	...	15
36 Drayton	1	390	499	88	56	....	56	5	.....	...	....
37 Dresden	1	320	417	75	46	....	34	17	.....	...	....
38 Drumbo	1	247	247	54	57	....	13	.....	.....	...	....
39 Dryden	1	297	330	73	43	....	33	9	.....	...	....
40 Eganville	1	246	351	20	23	....	49	15	.....	...	....
41 Eganville (R. C. S. S.)	1	424	344	65	68	....	58	305	3,000	18	3
42 Elmira	1	301	392	54	52	....	42	34	.....	...	....
43 Elmvale	1	258	521	66	68	....	19	14	.....	...	....
44 Ennismore	1	273	321	30	15	....	11	.....	.....	...	....
45 Erin	1	268	319	37	55	....	12	.....	.....	...	....
46 Espanola	....	188	300	42	66	....	30	.....	.....	...	....
47 Fenelon Falls	1	352	375	50	48	....	58	29	.....	...	....
48 Feversham	1	116	131	18	10	.....	.....	.....	.....	...	....
49 Finch	1	378	524	117	62	....	84	10	.....	...	....
50 Fingal	1	164	352	53	51	....	33	30	.....	...	....
51 Frankford	1	268	371	53	49	....	50	14	815	...	....
52 Gore Bay	1	244	353	40	38	....	18	.....	.....	...	....
53 Grand Valley	1	309	593	64	79	....	30	73	.....	...	....
54 Hanover	1	396	538	48	51	....	74	21	.....	...	....
55 Harrow	1	202	301	49	42	....	52	.....	.....	...	....
56 Havelock	1	455	324	38	41	....	52	12	.....	...	....
57 Hepworth	1	23	195	50	50	....	51	.....	.....	...	....

SCHOOLS (Continued)

BOARD, VALUE OF EQUIPMENT, ETC.

	Pictures	Total value of General Equipment	Religious and other Exercises					Destination of Pupils							
			Schools in which the Bible or selections therefrom are used	Schools in which Passages are Memorized	Schools opened with Prayer	Schools closed with Prayer	Commencement Exercises	Commerce	Agriculture	Law, Medicine, Dentistry or the Church	Teaching	The Trades	Other occupations	Other Continuation or High Schools	Without occupation
	$	$													
1	14	177	1		1										
2		898	1		1			6		1		3		1	1
3		750	1		1				2				2	1	
4		335			1		1								
5		914	1		1				1	1	4	2	2	4	
6		425	1		1									2	3
7		869			1			3	2		2	1		3	5
8		671			1				1		8		9	1	
9		612	1		1				1				2		
10	220	1,234			1		1	4		2	4		1	2	2
11		822	1		1				3		2		1		5
12	75	1,070	1		1	1	1	1	1		2		1	4	
13		1,137	1		1			2	1		3	2		2	
14		832	1		1								4	2	2
15		680	1		1			1	5		2	1	1	5	1
16		417	1		1		1	2	1						
17		766			1						1		3	2	4
18		412			1					1					4
19		1,995			1		1	3	1				10	1	4
20		769			1		1								
21	54	941	1		1			2	3	1	10	5	2	6	3
22	24	949	1		1		1	7			1	2	2		2
23	197	1,189			1			2	2	2	3		4		
24		787	1		1			3	4		1	3	2		3
25		877	1		1			2		1	4	1	3	1	2
26		726	1		1			1			2	3	1	3	4
27	18	923			1		1		4	1	2	1	1	2	
28	35	965			1			1	2						
29	19	469	1		1										
30		838	1		1			4	2			2	5	3	
31	25	661			1			2	2						4
32	10	949	1		1				4	3	1		1	5	
33		723	1		1			1	1			3	4	4	2
34	2	585			1	1			3		1				5
35		629	1		1			5				1	3	5	
36		1,094	1		1			4	5	1	5	1		5	6
37		909			1			4	4		2		2	5	
38	20	638	1		1	1		1	2				2		
39		785	1		1			3				2		4	3
40	5	709	1		1			2	1		3		4	1	2
41	29	4,314	1	1	1	1	1	3	1	4	5		3	3	1
42		875			1			3	2	1	4	3		4	
43		946			1		1	2	2		4			1	2
44		650	1		1	1	1				3		1		1
45		691	1		1		1	3	2	4				2	2
46		626			1	1		2			1	1		1	
47	18	930			1			2	2		2		3	3	
48	8	283	1		1										
49	25	1,200	1		1	1			6		4		2	2	2
50		683			1				1		1		2	1	4
51		1,620			1			3	2	1	1			4	5
52	50	743	1		1	1		5	6		1	1	4	1	
53		1,148	1		1	1		3	8	4	1	1			
54	96	1,224	1		1		1		2		1	1	4	6	3
55		646	1		1			1	4		1	1	3	4	6
56	20	942	1		1						4	1	2	6	1
57	52	421			1			1	2						

CONTINUATION

II. TABLE I—SCHOOLS UNDER PUBLIC SCHOOL

Continuation Schools	Schools under Public or Separate School Board	Value of General: Library	Scientific Apparatus	Charts, Maps and Globes	Art Models	Typewriters	Biological Specimens	Equipment for Physical Culture	Gymnasium, not including equipment	Museum	Aquarium or Herbarium
		$	$	$	$	$	$	$	$	$	$
58 Highgate	1	319	310	66	41	....	51	17	.....	...	....
59 Huntsville	1	384	600	90	58	....	67	73	50	...	....
60 Jarvis	1	307	190	38	52	....	23	.....	.....	...	....
61 Jockvale	1	156	196	57	22	....	34	10	.....	...	....
62 Kars	1	213	213	68	41	....	28	45	.....	...	....
63 Keewatin	1	314	416	125	42	300	26	5	.....	...	....
64 Kenmore	1	278	503	34	55	....	79	.....	.....	...	....
65 Kinburn	1	207	316	67	18	....	28	24	.....	...	....
66 Lakefield	1	350	754	116	42	....	68	.....	.....	...	....
67 Lanark	1	294	427	62	49	....	58	27	.....	...	....
68 Lansdowne	1	234	377	40	35	....	46	11	.....	...	....
69 Lion's Head	1	82	123	7	37	....	18	.....	.....	...	....
70 Little Current	1	200	147	81	31	....	23	26	.....	...	....
71 Lobo	....	62	157	19	39	.....	.....	.....	.....	...	....
72 Lucknow	1	316	533	44	44	....	56	.....	.....	...	....
73 Malakoff	1	149	305	33	31	....	45	.....	.....	...	....
74 Manitowaning	1	121	169	33	46	....	28	.....	.....	...	....
75 Manotick	1	148	150	38	45	....	13	20	.....	...	....
76 Marmora	....	231	508	72	48	....	52	.....	.....	...	....
77 Maxville	1	198	409	38	50	....	51	.....	.....	...	....
78 Melbourne	1	229	279	50	44	....	37	22	.....	...	....
79 Merlin	1	228	369	36	43	....	17	26	.....	...	....
80 Merrickville	1	280	385	59	34	....	62	18	.....	...	....
81 Metcalfe	1	272	301	53	38	....	54	10	.....	...	....
82 Millbrook	1	435	400	71	65	....	77	.....	.....	...	....
83 Milverton	1	96	356	109	32	....	25	.....	.....	...	....
84 Mimico	1	167	146	95	20	....	60	40	.....	...	....
85 Minden	1	16	76	25	17	....	.....	.....	.....	...	1
86 Morriston	1	.....	87	23	7	....	.....	.....	.....	...	....
87 Mount Albert	1	352	442	79	42	....	33	2	.....	...	....
88 Mount Brydges	....	204	382	60	33	....	39	84	.....	...	....
89 Navan	1	181	241	17	38	....	70	.....	.....	...	....
90 New Hamburg	1	321	406	48	51	....	82	10	.....	...	....
91 New Liskeard	1	360	447	104	74	....	107	.....	.....	...	....
92 North Augusta	1	257	220	51	31	....	8	8	.....	...	....
93 North Gower	1	335	308	77	67	....	51	11	.....	...	....
94 Norwich	1	342	397	68	33	....	60	9	.....	...	....
95 Odessa	1	314	376	69	46	....	37	18	.....	...	....
96 Oil Springs	1	304	358	20	44	....	28	17	.....	...	....
97 Orono	1	177	254	22	24	....	48	.....	.....	...	....
98 Paisley	1	265	506	61	63	....	83	31	.....	...	....
99 Pakenham	1	244	459	33	53	....	36	.....	.....	...	....
100 Palmerston	1	334	304	68	60	....	26	.....	.....	...	....
101 Plattsville	1	283	394	33	55	....	32	10	.....	...	....
102 Port Burwell	1	294	491	47	40	....	37	15	.....	...	....
103 Port Colborne	1	391	928	72	32	....	100	40	.....	...	....
104 Port Credit	1	231	361	83	35	....	63	.....	.....	...	....
105 Powassan	1	164	224	13	22	....	39	.....	.....	...	....
106 Princeton	1	303	276	23	35	....	23	47	.....	...	....
107 Richard's Landing	....	228	109	108	29	....	87	3	.....	...	....
108 Richmond	1	218	213	51	40	....	33	6	.....	...	....
109 Ridgeway	1	334	299	55	40	....	22	7	.....	...	....
110 Ripley	1	354	410	58	26	....	14	.....	.....	...	....
111 Rodney	1	310	490	55	50	....	41	6	.....	...	....
112 Russell	1	280	327	60	50	....	72	.....	.....	...	....
113 St. George	....	302	369	53	50	....	54	.....	.....	...	....
114 Schomberg	1	208	235	15	23	....	61	.....	.....	...	....

SCHOOLS (Continued)

BOARD, VALUE OF EQUIPMENT, ETC. (Continued)

	Equipment		Religious and other Exercises					Destination of Pupils								
	Pictures	Total value of General Equipment	Schools in which the Bible or selections therefrom used	Schools in which Passages are Memorized	Schools opened with Prayer	Schools closed with Prayer	Commencement Exercises	Commerce	Agriculture	Law, Medicine, Dentistry or the Church	Teaching	The Trades	Other Occupations	Other Continuation or High Schools	Without Occupation
	$	$													
58	30	834	1		1	1		1	3		1		4		3
59	20	1,342	1		1			9	3		2	4	4	4	2
60		610			1	1			5					4	
61		475	1		1				2					1	
62		608	1		1						2		1		
63		1,228			1		1				2	2	2		
64		949			1		1		7	2	4			1	2
65	12	672	1		1	1					1	1		3	1
66		1,330	1		1			9	2	1	3	1	2	3	
67	15	932	1		1			4	3		2		1	2	7
68		743	1		1	1		3							
69		267	1		1										
70		508	1		1			1			3	2	1	5	5
71		277	1		1		1								
72		993	1		1			3	6	1	4	3	1	3	6
73		563	1		1				2	1	3			1	
74		397	1		1			3	4		5		4	2	2
75		414			1			2							2
76		911			1										
77		746	1		1			1	8	5	1	1			5
78	10	671	1		1			4	4		1	1	1		
79	5	724	1		1			4	2						
80	5	843	1		1			4			7		3	1	3
81	10	738	1		1			2	7		4		1	1	1
82		1,048			1			1	3		5	1		6	13
83	8	626	1		1			2	2				13	5	
84		528			1										
85		135	1		1										
86		117	1		1										
87	79	1,029	1		1			2	5		1	2	3		
88	24	826			1				2		2		1		
89	10	557	1		1			3	6		2		1		
90		918	1		1			5	2	1			2	7	2
91		1,092	1		1			3	1	1	2		4	5	
92	2	577	1		1				2	1	2				
93	17	866			1		1	4	6		4		1	4	
94		909	1		1		1	4	11		6	1	1	5	
95		860	1		1			1			1			2	3
96		771	1		1			1		1	3	1	1	3	2
97		525			1		1	2	3		2	1		2	3
98		1,009	1		1	1		1	7	1	5	2		1	
99		825			1			1	4		3	1	2		
100		792	1		1			4	6		1	1	10		
101		807	1		1			3	3		1	1	2	1	
102	25	949	1		1						1		6	1	4
103		1,563			1			2	1			2		26	6
104	40	813			1		1							2	
105		462			1			2			1			3	
106		707	1		1	1		2	1	2	2				1
107	15	579	1		1		1	6					2	1	
108		561	1		1										
109		757	1		1			2	1	1		3		1	
110		862	1		1			5	3	1	4		1	2	1
111	4	956	1	1	1	1	1		1		1		2	1	
112		789			1				2					1	2
113		828			1			2	3			1	1	6	
114		542	1		1		1	1	7					7	

CONTINUATION

II. TABLE I.—SCHOOLS UNDER PUBLIC SCHOOL

Continuation Schools	Schools under Public or Separate School Board	Value of General Library	Scientific Apparatus	Charts, Maps and Globes	Art Models	Typewriters	Biological Specimens	Equipment for Physical Culture	Gymnasium, not including equipment	Museum	Aquarium or Herbarium
		$	$	$	$	$	$	$	$	$	$
115 Scotland	1	177	291	74	77	....	59	15	.....	...	....
116 Southampton	1	342	622	96	53	60	25	10	.....	...	....
117 South Mountain	1	233	494	77	53	....	39	21	.....	...	....
118 South Porcupine	1	214	166	60	79	....	57	41	.....	...	....
119 Spencerville	1	184	319	37	42	....	38	.....	.....	...	....
120 Springfield	1	430	602	86	64	....	116	20	.....	...	....
121 Stayner	1	237	429	54	44	....	39	18	.....	...	....
122 Stella	.....	190	397	52	36	....	59	9	.....	...	....
123 Stouffville	1	152	406	49	12	....	41	5	.....	...	7
124 Sturgeon Falls	1	301	569	87	44	....	69	54	.....	...	....
125 Sutton	1	297	403	67	35	....	31	.....	.....	...	....
126 Tamworth	†	286	313	55	35	....	61	.....	.....	...	....
127 Tara	1	249	437	53	53	....	12	.....	.....	...	....
128 Tavistock	1	374	391	25	37	....	40	.....	.....	...	....
129 Teeswater	1	357	357	56	46	....	60	.....	.....	...	....
130 Thamesville	1	350	341	21	59	....	16	.....	.....	...	....
131 Thessalon	1	249	340	30	29	....	39	.....	.....	...	....
132 Thornbury	1	243	550	59	33	....	28	29	.....	...	....
133 Thorndale	.....	300	349	83	45	....	35	4	.....	...	....
134 Tilbury	1	211	295	63	37	....	23	25	.....	...	....
135 Timmins	1	202	177	66	44	....	21	.....	.....	...	....
136 Tottenham	1	249	330	60	63	10	41	10	.....	...	....
137 Warkworth	1	315	358	65	77	....	67	22	.....	...	....
138 Westboro'	1	307	262	45	47	100	51	.....	.....	...	....
139 West Lorne	1	299	368	66	61	....	43	13	.....	...	....
140 Westmeath	1	190	210	43	32	....	58	9	.....	...	....
141 Westport	1	293	483	38	25	....	73	33	.....	...	....
142 Westport (R. C. S. S.)	1	323	290	50	37	....	60	.....	.....	...	....
143 Winona	1	210	216	30	35	....	22	16	.....	...	....
144 Wroxeter	1	400	387	49	52	....	23	.....	.....	...	
1 Totals, 1920	133	37,392	51,458	7,967	6,234	640	6,281	2,067	3,865	18	39
2 Totals, 1919	128	34,051	45,578	6,928	5,847	310	5,018	1,418	3,050	18	32
3 Increases	5	3,341	5,880	1,039	387	330	1,263	649	815	...	7
4 Decreases	.....	.....	.....	.....	.....	....	.....	.....	.....	...	....
5 Percentages	.....	31.78	43.74	6.77	5.30	.54	5.34	1.75	3.28	.01	.03

† Consolidated School Board.

SCHOOLS (Continued)

BOARD, VALUE OF EQUIPMENT, ETC. (Concluded)

Equipment			Religious and other Exercises					Destination of Pupils							
	Pictures	Total value of General Equipment	Schools in which the Bible or selections therefrom are used	Schools in which Passages are Memorized	Schools opened with Prayer	Schools closed with Prayer	Commencement Exercises	Commerce	Agriculture	Law, Medicine, Dentistry or the Church	Teaching	The Trades	Other occupations	Other Continuation or High Schools	Without occupation
		$													
115	18	711	1	....	1	.....	.....	9	1	....	2	....	2	1	4
116	..	1,208	1	....	1	.....	.....	2	.....	.....	.....	.....	6	4	1
117	52	969	.....	....	1	.....	.....	.....	5	....	3	1	.....	2	.....
118	27	644	1	....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
119	...	620	1	....	1	.....	.....	.....	.....	.....	1	....	1	3	.....
120	...	1,318	1	....	1	.....	.....	2	2	....	3	2	.....	3	5
121	...	821	.....	....	1	.....	.....	9	1	2	3	....	.....	5	5
122	16	759	1	....	1	.....	1	.....	1	....	2	1	.....	1	5
123	...	672	1	....	1	.....	.....	2	6	.....	.....	.....	2	3	.....
124	26	1,150	1	....	1	1	.....	6	.....	.....	.....	.....	2	3	.....
125	...	833	.....	....	1	.....	.....	1	2	4	.....	.....	2	3	1
126	...	750	.....	....	1	.....	.....	4	7	....	8	1	.....	2	1
127	...	804	1	....	1	.....	.....	4	10	1	.....	1	2	4	.....
128	15	882	1	....	1	.....	.....	3	.....	.....	1	1	.....	4	.....
129	..	876	.....	....	1	.....	.....	2	5	....	2	....	2	6	.....
130	...	787	.....	....	1	.....	.....	11	5	....	1	....	.....	8	4
131	...	687	1	....	1	.....	.....	2	1	....	4	....	17	6	.....
132	...	942	.....	....	1	.....	.....	.....	.....	.....	.....	5	8	5	2
132	...	816	.....	....	1	.....	.....	.....	3	1	.....	.....	1	.....	2
134	20	674	.....	....	1	.....	.....	3	2	....	2	....	3	4	4
135	...	510	1	....	1	.....	.....	6	.....	.....	.....	....	2	2	1
136	...	763	1	....	1	.....	.....	3	.....	.....	1	.....	.....	3	.....
137	10	914	1	....	1	.....	.....	2	3	....	.....	.....	.....	3	.....
138	40	852	1	....	1	.....	.....	4	1	....	.....	.....	8	5	.....
139	50	900	1	....	1	.....	1	1	.....	.....	1	2	2	3	3
140	14	556	1	....	1	.....	.....	1	.....	.....	.....	.....	.....	7	4
141	...	945	1	....	1	.....	.....	.....	1	.....	.....	1	.....	.....	.....
142	33	793	1	1	1	1	.....	.....	.....	1	4	.....	.....	2	2
143	...	529	1	....	1	1	.....	.....	2	.....	.....	.....	.....	6	.....
144	...	911	1	....	1	.....	.....	.....	2	.....	.....	.....	3	3	.....
1	1,668	117,629	98	2	143	19	25	280	298	56	228	89	237	336	214
2	1,040	103,290	80	3	137	23	22	215	269	46	230	78	224	297	71
3	628	14,339	18	....	6	.....	3	65	29	10	.....	11	13	39	143
4	...	.....	.....	1	.....	4	.....	.....	.....	.....	2	....	.....	.....	.....
5	1.41	.....	68.05	1.38	99.30	13.19	17.36	16.11	17.14	3.22	13.12	5.12	13.63	19.33	12.31

CONTINUATION

III. TABLE J—ATTENDANCE, PUPILS IN THE SCHOOLS

Continuation Schools	Pupils					Number of Pupils in—			Number of Pupils from—		
	Total number of pupils on the roll for the year	Number of pupils admitted for the first time to a secondary school	Boys on the roll for the year	Girls on the roll for the year	Average Daily Attendance	Lower School		Middle School	School Sections forming C. S. District or from School Section	Other Sections	No. of other Sections thus represented
						F. I	F. II				
1 Aberfoyle	13	12	5	8	10	12	1	.....	11	2	2
2 Acton	61	21	25	36	53	21	29	11	47	14	9
3 A incourt	25	11	13	12	22	11	11	3	8	17	6
4 Ailsa Craig	28	15	10	18	24	15	13	.....	11	7	8
5 Alvinston	41	23	16	25	39	27	12	2	18	23	9
6 Arkona	15	4	5	10	14	5	10	.....	7	8	5
7 Ayr	42	24	20	22	35	26	9	7	37	5	3
8 Bancroft	27	12	12	15	26	13	7	7	18	9	9
9 Bath	24	10	10	14	21	10	9	5	15	9	5
10 Beaverton	46	9	15	31	37	15	15	16	24	22	5
11 Beeton	34	10	13	21	23	10	13	11	22	12	3
12 Belmont	69	29	24	45	59	29	18	22	20	49	8
13 Blenheim	71	40	32	39	66	38	25	8	59	12	4
14 Bl'nd River	22	11	8	14	19	11	7	4	21	1	1
15 Blyth	38	16	9	29	34	16	10	12	17	21	11
16 Bolton	17	9	9	8	14	9	8	.....	10	7	2
17 Bo hwell	34	13	15	19	26	17	14	3	23	11	5
18 Bowesville	7	3	2	5	6	3	4	.....	5	2	2
19 Bridgeburg	50	28	23	27	38	32	10	8	34	16	4
20 Bruce Mines	31	14	10	21	27	14	9	8	16	15	5
21 Brussels	59	22	22	37	51	23	20	16	20	39	17
22 Burk's Falls	44	20	11	33	25	22	15	7	33	11	6
23 Cannington	60	25	15	45	46	25	16	19	47	13	2
24 Cardinal	38	14	12	26	32	14	15	9	32	6	2
25 Carp	48	23	12	36	38	23	17	8	27	21	6
26 Chapleau	31	13	19	12	24	13	9	9	31	.....	.....
27 Claremont	39	14	17	22	32	16	10	13	14	25	8
28 Clifford	30	12	13	17	27	13	7	10	23	7	5
29 Cochrane	10	5	1	9	8	10	.....	.....	10	.....	.....
30 Coldwater	35	12	15	20	30	12	9	14	27	8	4
31 Comber	19	7	10	9	14	8	7	4	14	5	3
32 Cookstown	44	16	20	24	38	20	12	12	24	20	9
33 Creemore	44	18	16	28	38	18	16	10	11	33	12
34 Delaware	49	18	21	28	44	18	16	15	17	32	12
35 Delhi	25	15	10	15	21	18	7	.....	13	12	5
36 Drayton	89	27	36	53	75	27	34	28	23	66	23
37 Dresden	66	26	30	36	58	25	21	20	37	29	13
38 Drumbo	21	9	9	12	18	9	8	4	14	7	5
39 Dryden	17	9	8	9	12	9	5	3	14	3	2
40 Eganville	35	11	11	24	31	11	16	8	19	16	6
41 Eganville (R.C.S. Sch.)	68	30	29	39	57	26	21	21	36	32	18
42 Elmira	74	42	36	38	54	42	15	17	45	29	6
43 Elmvale	34	13	13	21	27	13	15	6	16	18	9
44 Ennismore	27	11	12	15	22	11	8	8	26	1	1
45 Erin	32	14	9	23	25	14	11	7	15	17	10
46 Espanola	12	7	3	9	9	8	4	.....	11	1	1
47 Fenelon Falls	59	26	25	34	53	27	17	15	38	21	12
48 Feversham	6	4	3	3	5	5	1	.....	3	3	3
49 Finch	71	23	31	40	56	23	30	18	27	44	12
50 Finga'	28	10	12	16	22	12	6	10	18	10	6
51 Frankford	30	10	14	16	20	14	9	7	20	10	7
52 Gore Bay	44	19	17	27	35	19	13	12	22	22	14
53 Grand Valley	49	15	21	28	38	16	15	18	18	31	19
54 Hanover	63	28	27	36	55	33	17	13	40	23	9
55 Harrow	33	18	16	17	27	21	7	5	13	20	6
56 Haveloek	40	19	20	20	35	19	11	10	32	8	3
57 Hepworth	17	8	11	6	13	8	9	.....	11	6	.....

SCHOOLS (Continued)

AND IN THE VARIOUS SUBJECTS ETC.

	Number of Pupils from Families whose Head is occupied as below—								Numbers of Pupils in the Various Subjects					
	Commerce	Agriculture	Law, Medicine, Dentistry or the Church	Teaching	The Trades	Labouring occupations	Other occupations	Without occupation	English Grammar	English Composition and Rhetoric	English Literature	Canadian History	British History	Ancient History
1	1	12							13	13	13	13	1	
2	1	13	1		35	3	7	1	56	50	61	61	61	11
3	1	18	3			3			22	25	25	14	14	3
4	2	17			6	3			28	28	28	15	3	
5	2	29	1		2	4	2	1	39	41	41	41	14	2
6	1	11			1		1	1	15	15	14	14	10	
7	5	20	1		4		11	1	35	42	42	26	16	7
8	8	7	1	1	2	3	5		19	27	27	27	27	6
9	1	14	2		2		5		19	22	22	23	13	4
10	10	26			4	2	3	1	30	46	46	31	31	16
11		17			3	3	10	1	20	34	34	34	24	13
12	9	49		2	4	5			47	69	69	69	40	22
13	8	29	1		16	12	5		63	71	71	47	33	8
14	10				3	4	5		18	22	22	22	11	4
15		22			8	4	4		26	38	38	38	22	12
16	3	8	2		3		1		16	17	17	17	17	
17		14	1		12	3	4		31	34	34	17	17	3
18	1	6							7	7	7	3	4	
19	5	3			16	13	13		38	50	50	50	18	8
20	3	20	1		3	2	2		23	30	30	30	16	7
21	2	32			1	2	14	8	43	59	59	43	59	16
22	11	6	5		7	15			37	44	44	44	44	7
23	8	32	6		4	4	4	2	41	60	60	60	35	19
24		16		1	8	6	7		29	38	37	37	23	5
25	3	22	1	1	15	4	2		40	48	48	48	25	8
26	6		1		21		3		22	31	31	31	18	9
27		24	4		4	5	2		26	39	39	39	23	13
28	2	11	2		7		3	5	20	30	30	30	17	10
29	2	1			5		2		10	10	10	10		
30	3	10	2		12	2	16		23	35	35	35	22	12
31	1	11	1		1	3	2		15	19	19	19	11	4
32	5	30			2		7		32	44	44	44	24	12
33	5	30	1		2	1	4	1	34	44	44	44	25	10
34	4	42	3						34	48	48	48	48	14
35	6	12	3		4				25	25	25	25		
36	8	65	1		4	4	1	6	58	86	89	88	62	28
37	11	31	5	1	3	8	4	3	46	65	66	65	40	19
38	2	12	3		3	1			17	21	21	21	21	4
39	2	3			1	11			14	17	17	14	8	3
40	5	19			6	3	2		27	35	35	19	24	8
41	14	30	5		6	8	7		47	68	68	68	68	21
42	7	20	8	3	18	12	4	2	57	74	74	74	32	17
43	7	16					11		28	34	34	34	21	6
44		27							19	27	27	27	16	8
45	5	22	2		1			2	25	32	32	32	18	7
46	1	1			6	1	3		12	12	12	12	12	
47	13	19	4		4	2	14	3	44	59	59	42	32	15
48		5			1				6	6	6	6	6	
49	5	44	3		6	1	12		53	71	71	71	47	18
50	1	22	3				2		18	28	28	28	16	10
51	4	19	1		3	2		1	23	30	30	30	30	7
52	14	18	2		4		6		32	44	44	44	23	12
53	10	30	3		2	2	1	1	31	49	49	49	49	18
54	16	16	4		9	10	6	2	50	63	63	63	63	13
55	4	22	2		3		2		28	33	33	33	12	5
56	3	10	1			2	22	2	30	40	40	40	40	10
57	7	4			4	2			17	17	17	17	17	

CONTINUATION

III TABLE J—ATTENDANCE, PUPILS IN THE SCHOOLS

Number of Pupils in the Various Subjects—Continued

Continuation Schools	Geography	Reading	Arithmetic and Mensuration	Algebra	Geometry	French	German	Latin
1 Alberfoyle	13	13	13	13	1	11	.....	13
2 Acton	50	50	50	61	40	55	.....	54
3 Agincourt	11	22	22	25	14	25	.....	25
4 Ailsa Craig	28	28	28	28	13	27	.....	27
5 Alvinston	39	39	39	41	39	39	.....	39
6 Arkona	15	15	15	14	10	10	.....	14
7 Ayr	35	35	35	42	16	42	.....	42
8 Bancroft	19	19	19	27	15	18	.....	18
9 Bath	.....	18	19	22	13	22	.....	23
10 Beaverton	30	30	30	46	31	42	.....	43
11 Beeton	20	20	20	34	34	28	.....	28
12 Belmont	47	47	47	69	40	67	.....	68
13 Blenheim	63	63	63	71	33	60	.....	60
14 Blind River	18	18	18	22	11	17	.....	17
15 Blyth	26	26	26	38	22	26	.....	38
16 Bolton	17	17	16	17	8	16	.....	15
17 Bothwell	31	31	31	2	2	22	.....	22
18 Bowesville	7	7	7	7	4	7	.....	7
19 Bridgeburg	42	42	38	50	18	38	.....	21
20 Bruce Mines	23	23	23	23	.....	17	.....	14
21 Brussels	43	43	43	58	35	36	.....	38
22 Burk's Falls	37	37	37	44	22	42	.....	42
23 Cannington	41	41	41	60	35	58	.....	57
24 Cardinal	29	29	29	38	24	35	.....	35
25 Carp	40	40	40	48	25	43	.....	43
26 Chapleau	22	22	22	31	18	26	.....	28
27 Claremont	2	26	26	39	23	39	.....	39
28 Clifford	20	20	20	30	17	27	.....	30
29 Cochrane	10	10	10	10	.....	10	.....	6
30 Coldwater	23	23	25	35	23	32	.....	32
31 Comber	15	15	15	19	11	19	.....	18
32 Cookstown	32	44	32	44	24	43	.....	43
33 Creemore	34	34	34	44	25	42	.....	42
34 Delaware	34	34	34	48	30	42	.....	44
35 Delhi	25	25	25	24	6	24	.....	23
36 Drayton	61	61	61	86	62	85	.....	85
37 Dresden	46	46	46	65	40	61	.....	61
38 Drumbo	17	17	17	21	12	21	.....	21
39 Dryden	14	14	14	17	8	17	.....	15
40 Eganville	27	27	27	35	24	22	.....	22
41 Eganville, (R. C. S. S.)	47	47	47	68	42	63	.....	63
42 Elmira	57	57	57	74	32	70	.....	70
43 Elmvale	28	28	28	34	21	30	.....	33
44 Ennismore	19	19	19	27	16	24	.....	24
45 Erin	25	25	25	32	18	30	.....	31
46 Espanola	12	12	12	12	4	11	.....	11
47 Fenelon Falls	44	27	44	59	32	58	.....	59
48 F versham	6	6	6	6	1	.....	.....	6
49 Finch	53	53	53	71	47	62	.....	62
50 Fingal	18	18	18	28	16	22	.....	22
51 Frankford	23	23	23	30	16	25	.....	23
52 Gore Bay	32	44	32	44	25	38	.....	38
53 Grand Valley	31	31	31	49	33	49	.....	49
54 Hanover	50	50	50	63	30	56	.....	55
55 Harrow	28	28	28	33	12	33	.....	32
56 Havelock	30	30	30	10	10	32	.....	36
57 Hepworth	17	17	17	17	9	17	.....	17

SCHOOLS (Continued)

AND IN THE VARIOUS SUBJECTS, ETC. (Continued)

Number of Pupils in the Various Subjects—continued.

	Zoology	Botany	Chemistry	Physics	Writing	Bookkeeping	Stenography	Typewriting	Art	Physical Culture	Agriculture
1	13	13	1	13	13	.....	.....	.....	13	13	.....
2	50	50	40	61	50	.....	.....	.....	50	61	.....
3	22	22	14	25	11	.....	.....	.....	22	25	.....
4	28	28	13	28	28	.....	.....	.....	28	28	.....
5	39	39	14	41	39	.....	.....	.....	39	41	.....
6	14	14	10	14	15	.....	.....	.....	14	15	.....
7	.....	35	16	42	35	.....	.....	.....	35	42	.....
8	19	19	13	13	19	.....	.....	.....	19	27	.....
9	18	18	23	22	18	.....	.....	.....	18	22	.....
10	30	30	31	46	30	.....	.....	.....	30	46	.....
11	21	21	34	33	21	.....	.....	.....	21	34	.....
12	47	47	40	69	47	.....	.....	.....	47	69	.....
13	63	63	8	71	63	.....	.....	.....	63	71	.....
14	18	18	11	22	18	.....	.....	.....	18	21	.....
15	26	26	12	38	26	.....	.....	.....	26	38	.....
16	16	16	8	17	17	16	.....	.....	16	17	.....
17	31	31	17	34	31	.....	.....	.....	31	34	.....
18	7	7	4	7	7	.....	.....	.....	7	7	.....
19	42	42	18	50	42	.....	.....	.....	50	50	.....
20	23	23	.....	.....	23	.....	.....	.....	23	30	.....
21	43	43	34	58	43	.....	.....	.....	43	58	.....
22	37	37	22	44	37	.....	.....	.....	37	44	.....
23	38	38	32	32	41	.....	.....	.....	38	60	.....
24	29	29	22	37	29	.....	.....	.....	28	38	.....
25	40	40	25	48	40	.....	.....	.....	40	48	.....
26	22	22	18	11	22	.....	.....	.....	22	31	.....
27	26	26	23	39	26	.....	.....	.....	26	39	.....
28	20	20	17	30	20	.....	.....	.....	20	30	.....
29	10	10	.....	10	10	4	.....	.....	10	10	.....
30	23	23	21	21	23	.....	.....	.....	23	35	.....
31	15	15	11	19	15	.....	.....	.....	15	19	.....
32	32	32	24	44	32	.....	.....	.....	32	44	.....
33	34	34	25	44	34	.....	.....	.....	34	44	.....
34	34	34	14	48	34	.....	.....	.....	34	49	.....
35	25	25	7	25	25	.....	.....	.....	24	25	.....
36	61	61	62	89	61	.....	.....	.....	59	88	59
37	46	46	40	65	46	.....	.....	.....	46	65	.....
38	17	17	12	21	17	.....	.....	.....	17	21	.....
39	14	14	8	17	14	.....	.....	.....	14	17	.....
40	27	27	24	35	27	.....	.....	.....	27	35	.....
41	43	43	42	68	4	.....	.....	.....	43	68	.....
42	57	57	32	74	57	.....	.....	.....	57	74	.....
43	28	28	21	34	28	.....	.....	.....	28	34	.....
44	19	19	8	8	19	.....	.....	.....	19	27	.....
45	25	25	7	18	25	.....	.....	.....	25	32	.....
46	12	12	4	12	12	.....	.....	.....	12	12	.....
47	44	44	15	59	44	.....	.....	.....	44	59	.....
48	6	6	1	6	6	.....	.....	.....	6	6	.....
49	53	53	47	71	53	.....	.....	.....	53	71	.....
50	18	18	16	28	18	.....	.....	.....	18	28	.....
51	23	23	7	30	23	.....	.....	.....	23	30	.....
52	32	32	2[illegible]	44	.....	.....	.....	.....	32	44	.....
53	31	31	33	49	31	.....	.....	.....	31	49	.....
54	50	50	30	63	50	.....	.....	.....	50	63	.....
55	28	28	12	33	28	.....	.....	.....	24	33	.....
56	30	30	21	21	30	.....	.....	.....	30	40	.....
57	17	17	17	17	17	.....	.....	.....	17	17	.....

CONTINUATION

III. TABLE J—ATTENDANCE, PUPILS IN THE SCHOOL

Continuation Schools	Pupils					Number of Pupils in—			Number of Pupils from		
	Total number of pupils on the roll for the year	Number of pupils admitted for the first time to a secondary school	Boys on the roll for the year	Girls on the roll for the year	Average Daily Attendance	Lower School		Middle School	School Sections forming C. S. District or from School Section	Other Sections	No. of other Sections thus represented
						F. I	F. II				
58 Highgate	51	23	25	26	41	26	17	8	22	29	6
59 Huntsville	63	26	29	34	52	30	13	20	50	13	4
60 Jarvis	34	14	11	23	29	16	18	.....	34	.....	5
61 Jockvale	10	4	2	8	7	4	6	.....	8	2	2
62 Kars	24	9	9	15	19	9	10	5	17	7	5
63 Keewatin	30	10	12	18	24	11	14	5	29	1	1
64 Kenmore	45	16	17	28	36	17	16	12	21	24	6
65 Kinburn	35	17	11	24	15	18	15	2	14	21	9
66 Lakefield	70	23	21	49	61	23	27	20	47	23	9
67 Lanark	76	27	32	44	65	28	22	26	33	43	16
68 Lansdowne	30	14	10	20	24	16	10	4	20	10	7
69 Lion's Head	9	5	2	7	7	5	4	.....	9	.....	.....
70 Little Current	18	11	5	13	16	12	6	.....	14	4	4
71 Lobo	31	21	10	21	26	20	11	.....	29	2	2
72 Lucknow	67	26	26	41	54	22	29	16	27	40	14
73 Malakoff	14	2	3	11	12	2	7	5	10	4	1
74 Manitowaning	23	13	5	18	17	16	7	.....	10	13	7
75 Manotick	31	6	9	22	23	11	14	6	14	17	6
76 Marmora	57	24	22	35	48	25	26	6	34	23	10
77 Maxville	65	29	21	44	50	34	20	11	16	49	22
78 Melbourne	46	13	10	36	38	12	15	19	14	32	11
79 Merlin	51	14	25	26	36	19	20	12	22	29	11
80 Merrickville	54	25	13	41	35	28	10	16	31	23	10
81 Metcalfe	29	17	10	19	22	18	8	3	12	17	6
82 Millbrook	77	39	29	48	62	42	21	14	40	37	13
83 Milverton	43	21	21	22	39	22	14	7	30	13	11
84 Mimico	64	39	30	34	60	40	13	11	64	.....	.....
85 Minden	20	18	4	16	15	7	13	.....	20	.....	.....
86 Morriston	11	11	2	9	8	11	.....	.....	6	5	3
87 Mount Albert	33	10	12	21	25	17	9	7	25	8	5
88 Mount Brydges	43	18	14	29	36	18	12	13	37	6	5
89 Navan	27	9	11	16	24	9	9	9	17	10	6
90 New Hamburg	37	15	19	18	34	16	9	12	17	20	12
91 New Liskeard	48	21	8	40	38	25	15	8	32	16	14
92 North Augusta	25	11	8	17	22	11	9	5	16	9	7
93 North Gower	26	8	10	16	22	10	7	9	18	8	3
94 Norwich	92	42	49	43	80	43	34	15	41	51	14
95 Odessa	31	8	13	18	24	8	14	9	12	19	9
96 Oil Springs	31	9	9	22	23	9	13	9	22	9	5
97 Orono	46	20	25	21	39	20	14	12	22	24	12
98 Paisley	64	33	28	36	55	34	14	16	30	34	12
99 Pakenham	47	20	21	26	43	20	13	14	24	23	8
100 Palmerston	57	24	22	35	43	23	25	9	35	22	11
101 Plattsville	36	16	17	19	29	16	13	7	19	17	4
102 Port Burwell	26	8	9	17	24	9	11	6	24	2	1
103 Port Colborne	83	35	48	35	57	43	22	18	61	22	4
104 Port Credit	43	17	19	24	36	17	15	11	21	22	6
105 Powassan	31	22	12	19	28	22	9	.....	25	6	4
106 Princeton	23	9	10	13	11	9	6	8	21	2	2
107 Richard's Landing	16	6	3	13	14	6	10	.....	14	2	2
108 Richmond	37	24	8	29	33	25	8	4	15	22	.....
109 Ridgeway	53	25	16	37	43	25	13	15	30	23	7
110 Ripley	73	26	25	48	63	26	21	26	33	40	12
111 Rodney	61	23	33	28	47	22	25	14	35	26	9
112 Russell	42	18	16	26	36	17	18	7	28	14	4
113 St. George	49	17	23	26	39	17	25	7	39	10	5
114 Schomberg	26	17	13	13	20	17	9	.....	17	9	4

SCHOOLS (Continued)

AND IN THE VARIOUS SUBJECTS, ETC. (Continued)

	Number of Pupils from Families whose Head is occupied as below—								No. of Pupils in the Various Subjects					
	Commerce	Agriculture	Law, Medicine, Dentistry or the Church	Teaching	The Trades	Labouring occupations	Other Occupations	Without Occupation	English Grammar	English Composition and Rhetoric	English Literature	Canadian History	British History	Ancient History
58	1	44			1	3	1	1	40	51	51	27	11	
59	9	13	5	1	11	16	6	2	43	63	63	63	33	20
60	1	23	2	2	1	3	2		34	34	34	34	18	
61		10							10	10	10	10	10	
62	3	14	2		1	2	2		19	24	24	24	15	5
63		3			4	11	12		25	30	30	30	19	5
64	5	30	3		2	3	2		33	45	45	29	28	12
65	3	23	1		4	3		1	33	35	35	35	17	2
66		22	3		18	12	15		50	70	70	70	47	20
67	7	50	2		13	3		1	50	73	71	71	71	21
68	11	12	1		3	3			26	30	30	20	14	4
69	3	2				4			9	9	9	5	4	
70	4	6	1			6		1	18	18	18	18	6	
71		28	1		1	1			31	31	31	31	11	
72	16	38	3	1	4	2	3		51	67	67	67	67	16
73		14							9	13	14	14	14	5
74	2	12	1	1	1	4	2		23	23	23	23	7	
75	3	17	2		9				25	31	31	31	14	6
76	11	17	2		10	3	14		51	56	56	56	31	5
77	4	47	4		7	1	1	1	54	65	65	65	65	11
78	1	35	1	2		5	2		27	46	46	46	34	19
79	9	35			2	3	2		39	51	51	51	31	12
80	2	21	4		13	13		1	38	54	54	54	26	16
81	1	22	1		1	3	1		26	29	29	29	11	3
82	5	39	5			19	5	4	63	77	77	77	35	14
83	5	15	1		10	3	8	1	36	45	43	43	21	7
84	14	6	6		10	20	4	4	53	64	64	64	24	11
85	1	12	1		1	5			20	20	20	20	13	
86		10			1				11	11	11	11		
87	7	12	1	1	4	3	5		26	33	33	33	16	7
88		39			4				30	41	41	41	41	11
89	5	18			3	1			18	27	27	27	27	9
90	11	14	5		4	1	2		21	37	37	37	21	12
91	9	11	5	2	6	5	9	1	40	48	48	48	23	8
92	4	18	2				1		20	25	25	25	14	5
93	5	13	1		1	4		2	17	26	26	18	17	9
94	13	54	7		2	10		6	76	77	76	76	33	14
95	2	21	1		6		1		22	30	31	31	24	9
96	1	10	1		3	1	15		22	31	31	31	22	9
97	6	29			3	2	4	2	34	44	44	44	44	11
98	3	40	3		2	2	13	1	48	64	64	64	30	16
99	3	36	2		2		3	1	33	47	47	47	27	14
100	5	24			14	11	3		48	57	57	57	34	9
101	6	17	2		1	5	5		29	36	36	29	20	5
102	5	9		1	3	8			20	19	20	19	19	6
103	5	15	3	1	14	27	18		65	83	83	83	40	17
104	5	17		1	5	4	11		32	43	43	43	26	11
105	3	12			8	3	5		31	31	31	31	9	
106		16	2		3	2			15	23	23	23	14	8
107		11			1	2	2		16	16	16	16	10	
108	1	29	4		3				33	36	36	36	11	3
109	9	20	2		9	5	4	4	38	53	53	53	53	15
110	17	49	2			4	1		47	72	72	72	47	25
111	6	28			8	10	9		47	60	60	60	38	13
112	6	25	2		6		1	2	35	42	42	42	25	6
113	4	30	1	1	11	2			42	49	49	49	32	7
114	6	12			1	6	1		26	26	26	26	9	

CONTINUATION

III. TABLE J—ATTENDANCE, PUPILS IN THE SCHOOLS

Continuation Schools	Number of Pupils in the Various Subjects—Continued							
	Geography	Reading	Arithmetic and Mensuration	Algebra	Geometry	French	German	Latin
58 Highgate	40	40	40	51	27	48	.....	47
59 Huntsville	43	43	43	63	33	53	.....	50
60 Jarvis	34	34	34	34	34	26	.....	26
61 Jockvale	10	10	10	10	6	3	.....	3
62 Kars	19	19	19	24	15	23	.....	22
63 Keewatin	25	25	25	25	19	28	.....	27
64 Kenmore	33	33	33	45	28	41	.....	41
65 Kinburn	33	33	34	35	33	35	.....	35
66 Lakefield	50	50	50	70	47	54	.....	54
67 Lanark	50	50	50	74	74	61	.....	73
68 Lansdowne	26	26	26	30	14	27	.....	26
69 Lion's Head	9	9	9	9	4	9	.....	8
70 Little Current	18	18	18	18	6	11	.....	11
71 Lobo	31	31	31	31	11	28	.....	26
72 Lucknow	51	51	51	67	48	50	.....	50
73 Malakoff	9	9	10	13	11	6	.....	6
74 Manitowaning	23	23	23	23	7	8	.....	8
75 Manotick	25	25	25	31	19	31	.....	21
76 Marmora	51	51	51	57	56	53	.....	53
77 Maxville	54	54	54	65	31	46	.....	43
78 Melbourne	27	27	28	46	34	40	.....	39
79 Merlin	39	39	39	51	32	48	.....	45
80 Merrickville	38	38	38	54	26	44	.....	43
81 Metcalfe	26	26	26	29	11	29	.....	24
82 Millbrook	63	63	63	77	35	62	.....	60
83 Milverton	36	36	37	45	23	39	.....	43
84 Mimico	53	53	53	64	24	63	.....	62
85 Minden	20	20	20	20	13	7	.....	7
86 Morriston	11	11	11	11	.....	11	.....	11
87 Mount Albert	26	26	26	33	16	29	.....	29
88 Mount Brydges	30	30	30	41	23	34	.....	34
89 Navan	18	18	19	27	18	22	.....	22
90 New Hamburg	21	25	21	37	21	30	3	35
91 New Liskeard	40	25	40	48	23	48	.....	48
92 North Augusta	20	20	20	25	14	20	.....	21
93 North Gower	17	17	17	26	18	18	.....	20
94 Norwich	76	76	76	91	77	83	.....	72
95 Odessa	22	22	24	31	22	18	.....	20
96 Oil Springs	22	22	22	31	22	24	.....	23
97 Orono	34	34	34	45	45	46	.....	46
98 Paisley	48	48	49	64	30	54	.....	52
99 Pakenham	33	33	33	47	27	46	.....	46
100 Palmerston	48	48	48	57	34	48	.....	52
101 Plattsville	29	29	29	36	20	34	.....	34
102 Port Burwell	20	20	19	25	18	25	.....	25
103 Port Colborne	65	65	65	83	40	82	.....	63
104 Port Credit	32	32	32	43	26	43	.....	43
105 Powassan	31	31	31	31	9	25	.....	22
106 Princeton	15	15	15	23	23	19	.....	15
107 Richard's Landing	16	16	16	16	10	4	.....	5
108 Richmond	33	33	33	37	11	34	.....	36
109 Ridgeway	38	38	38	53	28	51	.....	51
110 Ripley	47	47	47	73	73	73	.....	72
111 Rodney	47	47	47	60	38	51	.....	51
112 Russell	35	17	35	42	25	39	.....	35
113 St. George	42	42	42	49	32	43	.....	43
114 Schomberg	26	26	26	26	9	17	.....	14

SCHOOLS (Continued)

AND IN THE VARIOUS SUBJECTS ETC. (Continued)

	Number of Pupils in the Various Subjects—Continued										
	Zoology	Botany	Chemistry	Physics	Writing	Bookkeeping	Stenography	Typewriting	Art	Physical Culture	Agriculture
58	40	40	27	51	40	.....	.....	.....	40	51	.....
59	43	43	33	63	43	.....	.....	.....	43	63	.....
60	34	34	18	34	34	.....	.....	.....	34	34	.....
61	10	10	6	10	10	.....	.....	.....	10	10	.....
62	19	19	15	24	19	.....	.....	.....	19	24	.....
63	25	25	5	30	25	11	12	18	25	30	.....
64	33	33	28	45	33	.....	.....	.....	33	45	.....
65	33	33	17	33	33	.....	.....	.....	33	35	.....
66	50	50	47	70	50	.....	.....	.....	50	70	.....
67	50	50	45	73	50	.....	.....	.....	50	76	.....
68	26	26	14	14	26	.....	.....	.....	26	30	.....
69	9	9	4	9	9	.....	.....	.....	9	9	.....
70	18	18	6	18	18	.....	.....	.....	18	18	.....
71	31	31	11	31	31	31	.....	.....	31	31	.....
72	51	51	48	67	.....	.....	.....	.....	51	67	.....
73	9	9	12	14	9	.....	.....	.....	9	14	.....
74	23	23	7	23	23	.....	.....	.....	23	23	.....
75	25	25	19	19	25	.....	.....	.....	25	31	.....
76	51	51	31	56	51	.....	.....	.....	51	57	.....
77	54	54	31	65	54	.....	.....	.....	54	65	.....
78	27	27	34	34	27	.....	.....	.....	27	46	.....
79	39	39	32	51	39	.....	.....	.....	39	51	.....
80	38	38	54	54	38	.....	.....	.....	38	54	.....
81	26	26	11	11	26	.....	.....	.....	26	29	.....
82	63	63	35	77	63	.....	.....	.....	63	77	.....
83	36	36	23	45	36	.....	.....	.....	35	45	.....
84	53	53	24	64	53	.....	.....	.....	52	64	.....
85	20	20	13	20	20	.....	.....	.....	20	20	.....
86	11	11	.....	11	11	.....	.....	.....	11	11	.....
87	26	26	16	33	26	.....	.....	.....	25	33	.....
88	30	30	23	41	30	.....	.....	.....	30	41	.....
89	18	18	27	27	18	.....	.....	.....	18	27	.....
90	21	21	21	37	21	.....	.....	.....	21	37	.....
91	..	40	23	48	40	.....	.....	.....	40	48	40
92	20	20	14	25	20	.....	.....	.....	20	25	.....
93	17	17	17	26	17	.....	.....	.....	17	26	.....
94	75	75	14	91	76	.....	.....	.....	74	92	.....
95	22	22	23	23	22	.....	.....	.....	22	31	.....
96	22	22	22	31	22	.....	.....	.....	22	31	.....
97	34	34	11	11	34	.....	.....	.....	34	45	.....
98	48	48	30	30	48	.....	.....	.....	48	64	.....
99	33	33	27	47	33	.....	.....	.....	33	45	.....
100	48	48	34	57	48	.....	.....	.....	48	57	.....
101	20	20	20	36	29	.....	.....	.....	29	36	.....
102	20	20	17	26	20	.....	.....	.....	19	26	.....
103	65	65	40	83	65	.....	.....	.....	65	83	.....
104	32	32	26	43	32	.....	.....	.....	32	43	.....
105	31	31	9	31	31	.....	.....	.....	31	31	.....
106	15	15	14	23	15	.....	.....	.....	15	23	.....
107	16	16	10	16	16	.....	.....	.....	16	16	.....
108	33	33	11	36	33	.....	.....	.....	33	37	.....
109	38	38	28	53	38	.....	.....	.....	38	53	38
110	47	47	47	72	47	.....	.....	.....	47	72	.....
111	47	47	38	60	47	.....	.....	.....	47	59	.....
112	35	35	25	42	35	.....	.....	.....	35	42	.....
113	42	42	32	49	42	.....	.....	.....	42	49	.....
114	26	26	9	26	26	.....	.....	.....	26	26	.....

CONTINUATION

III. TABLE J—ATTENDANCE, PUPILS IN THE SCHOOLS

Continuation Schools	Pupils					Number of Pupils in			Number of Pupils from		
	Total number of pupils on the roll for the year	Number of pupils admitted for the first time to a secondary school	Boys on the roll for the year	Girls on the roll for the year	Average Daily Attendance	Lower School		Middle School	School Sections forming C.S. District or from School Section	Other Sections	No. of other Sections thus represented
						F. I	F. II				
115 Scotland	22	10	12	10	19	10	8	4	8	14	8
116 Southampton	44	15	22	22	35	19	15	10	37	7	4
117 South Mountain	39	13	13	26	33	14	19	6	11	28	8
118 South Porcupine	17	12	8	9	11	12	5	.....	17	.....	.....
119 Spencerville	40	20	17	23	35	20	12	8	18	22	7
120 Springfield	32	13	12	20	25	14	11	7	18	14	5
121 Stayner	53	17	29	24	51	16	23	14	20	33	5
122 Stella	15	6	2	13	14	7	3	5	3	12	4
123 Stouffville	51	22	25	26	44	23	12	16	28	23	10
124 Sturgeon Falls	28	13	6	22	25	14	7	7	17	11	4
125 Sutton	52	23	20	32	46	23	16	13	35	17	6
126 Tamworth	54	22	16	38	45	23	17	14	19	35	14
127 Tara	36	12	13	23	27	12	14	10	21	15	8
128 Tavistock	38	13	16	22	32	13	14	11	21	17	5
129 Teeswater	65	26	17	48	59	27	25	13	34	31	14
130 Thamesville	41	15	14	27	35	15	13	13	21	20	5
131 Thessalon	48	21	20	28	33	21	15	12	30	18	8
132 Thornbury	67	22	26	41	60	27	18	22	25	42	10
133 Thorndale	56	22	22	34	48	24	16	16	14	42	13
134 Tilbury	33	18	11	22	21	18	9	6	17	16	5
135 Timmins	22	13	11	11	20	14	8	.....	16	6	3
136 Tottenham	72	30	34	38	52	31	23	18	18	54	16
137 Warkworth	55	18	18	37	47	22	17	16	21	34	14
138 Westboro'	78	49	36	42	64	50	18	10	56	22	12
139 West Lorne	50	24	21	29	41	25	15	10	39	11	6
140 Westmeath	9	3	3	6	21	4	5	.....	5	4	2
141 Westport	36	15	13	23	30	19	6	1	28	8	6
142 Westport R.C.S. Sch.)	44	19	10	34	38	19	13	12	21	23	9
143 Winona	14	8	9	5	9	11	3	.....	11	3	3
144 Wroxeter	43	13	18	25	33	15	14	14	16	27	11
1 Totals, 1920-21	5,823	2,482	2,304	3,519	4,790	2,619	1,905	1,299	3,336	2,487	995
2 Totals, 1919-20	5,126	2,031	2,001	3,125	3,955	2,224	1,771	1,131	2,932	2,194	859
3 Increases	697	451	303	394	835	395	134	168	404	293	136
4 Decreases	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
5 Percentages		42.62	39.56	60.43	82.26	44.97	32.71	22.31	57.29	42.71	.....

SCHOOLS (Continued)

AND IN THE VARIOUS SUBJECTS ETC. (Continued)

	Number of Pupils from families whose Head is occupied as below—								Number of Pupils in the Various Subjects—					
	Commerce	Agriculture	Law, Medicine Dentistry or the Church	Teaching	The Trades	Labouring occupations	Other occupations	Without occupation	English Grammar	English Composition and Rhetoric	English Literature	Canadian History	British History	Ancient History
115	2	18	.....	.....	.....	.....	.....	2	18	2.	22	22	12	4
116	8	6	3	....	2	12	12	1	34	44	44	44	24	10
117	1	32	1	....	2	1	2	....	33	39	39	33	25	6
118	4	2	.....	.....	.....	9	2	....	17	1.	17	12	5	.....
119	4	27	2	....	4	....	1	2	33	40	40	40	21	8
120	1	21	2	....	1	3	4	....	25	32	32	32	18	7
121	6	27	1	....	1	6	12	....	37	53	53	17	37	14
122	.....	13	.....	.....	.....	.....	2	....	10	15	15	15	8	5
123	8	28	2	....	4	2	4	3	35	51	51	51	28	16
124	2	2	1	....	5	9	9	....	21	28	28	28	14	7
125	8	18	4	1	7	7	5	2	39	52	52	52	29	13
126	12	37	2	....	3	.....	.....	....	40	54	54	54	31	14
127	4	14	3	....	4	4	7	....	26	35	35	35	23	9
128	3	16	2	....	9	2	6	....	27	37	37	37	37	11
129	8	33	1	....	8	10	3	2	52	65	65	65	38	13
130	8	23	2	.....	.....	6	.....	2	28	41	41	41	26	13
131	7	20	1	....	9	6	4	1	36	48	48	36	27	12
132	8	35	10	2	1	11	.....	....	45	65	65	65	38	20
133	4	44	.....	.....	1	....	7	....	40	56	56	56	32	16
134	.....	18	1	....	1	1	12	....	27	33	33	33	15	6
135	7	.....	.....	.....	.....	.....	15	....	22	22	22	22	22	.....
136	8	39	6	1	9	5	.....	4	54	72	72	72	41	18
137	4	38	2	1	7	....	3	....	38	55	55	55	33	16
138	10	10	2	....	8	....	48	....	68	78	78	78	78	10
139	6	20	1	....	8	11	2	2	40	50	50	50	25	10
140	.....	7	.....	.....	.....	2	.....	....	9	9	9	4	5	.....
141	10	12	3	1	10	.....	.....	....	25	36	36	36	36	11
142	6	31	.....	.....	1	2	4	....	32	44	44	44	44	12
143	1	10	.....	1	.....	....	1	1	14	14	14	14	3	.....
144	.....	32	4	....	6	....	1	....	29	43	43	43	28	14
1	686	2,951	244	30	657	553	600	102	4,504	5,767	5,778	5, 491	3,666	1,262
2	605	2,629	238	16	604	428	485	121	3,989	5 110	5, 04	4,833	3.485	1,111
3	81	322	6	14	53	125	115	....	515	657	674	658	181	151
4	.....	.....	.....	.....	.....	.....	.....	19	.....	.....	.....	.....	.....	.....
5	11.78	50.68	4.19	.51	11.28	9.49	10.30	1.75	77.34	99.03	99.22	94.29	62.95	21.67

CONTINUATION

III. TABLE J—ATTENDANCE, PUPILS IN THE SCHOOLS

Continuation Schools	Number of Pupils in the Various Subjects—Concluded							
	Geography	Reading	Arithmetic and Mensuration	Algebra	Geometry	French	German	Latin
115 Scotland	18	18	18	22	12	22	.....	20
116 Southampton	34	34	34	44	24	44	.....	44
117 South Mountain	33	33	33	39	25	38	.....	39
118 South Porcupine	17	17	17	17	4	17	.....	16
119 Spencerville	32	32	32	40	21	36	.....	39
120 Springfield	25	25	25	32	18	31	.....	31
121 Stayner	40	16	40	53	37	36	.....	40
122 Stella	10	10	10	15	8	13	.....	13
123 Stouffville	35	35	35	51	28	43	.....	44
124 Sturgeon Falls	21	21	21	28	14	28	.....	28
125 Sutton	39	39	39	52	29	47	.....	43
126 Tamworth	40	40	40	54	31	37	.....	35
127 Tara	26	35	27	35	23	33	.....	33
128 Tavistock	27	27	28	37	24	24	7	32
129 Teeswater	52	52	52	65	38	63	.....	64
130 Thamesville	28	28	28	41	26	38	.....	38
131 Thessalon	36	36	36	48	27	44	.....	45
132 Thornbury	45	45	45	67	40	62	.....	60
133 Thorndale	40	40	40	56	32	45	.....	45
134 Tilbury	27	27	27	33	15	17	.....	15
135 Timmins	22	22	22	22	8	22	.....	22
136 Tottenham	54	54	54	72	41	70	.....	70
137 Warkworth	38	38	38	55	33	41	.....	40
138 Westboro	68	50	68	78	78	76	.....	68
139 West Lorne	40	40	40	50	25	50	.....	43
140 Westmeath	9	9	9	9	5	9	.....	8
141 Westport	25	25	25	36	17	33	.....	26
142 Westport, (R. C. S. S.)	32	32	32	44	25	42	.....	42
143 Winona	14	14	14	14	3	14	.....	13
144 Wroxeter	29	29	29	43	28	34	.....	39
1 Totals, 1920-21	4,460	4,458	4,520	5,729	3,404	5,086	10	5,031
2 Totals, 1919-20	4,001	3,929	3,986	5,095	2,973	4,263	24	4,358
3 Increases	459	529	534	634	431	823	.....	673
4 Decreases	.....	.....	.....	.....	.....	.....	14	.....
Percentages	76.59	76.55	77.62	98.38	58.45	87.34	.17	86.39

SCHOOLS (Continued)

AND IN THE VARIOUS SUBJECTS, ETC. (Concluded)

Number of Pupils in the Various Subjects—Concluded

	Zoology	Botany	Chemistry	Physic	Writing	Bookkeeping	Stenography	Typewriting	Art	Physical Culture	Agriculture
115	18	18	12	22	18	.....	.....	.....	18	22	.....
116	34	34	24	24	34	.....	.....	.....	34	44	.....
117	33	33	6	6	33	.....	.....	.....	33	39	.....
118	17	17	5	17	17	.....	.....	.....	17	17	.....
119	32	32	20	40	32	.....	.....	.....	32	39	.....
120	25	25	18	32	25	.....	.....	.....	25	32	.....
121	39	39	37	53	39	.....	.....	.....	37	53	.....
122	10	10	8	15	10	.....	.....	.....	11	15	.....
123	35	35	28	51	35	.....	.....	.....	35	51	.....
124	14	14	14	28	21	.....	.....	.....	21	28	.....
125	39	39	29	29	39	.....	.....	.....	39	52	.....
126	40	40	31	54	40	.....	.....	.....	40	53	.....
127	26	26	23	24	.....	.....	.....	.....	26	35	.....
128	27	27	24	37	27	.....	.....	.....	27	38	.....
129	52	52	38	65	52	.....	.....	.....	52	65	.....
130	28	28	26	41	28	.....	.....	.....	28	41	.....
131	36	36	27	48	36	.....	.....	.....	36	48	.....
132	45	45	66	66	45	.....	.....	.....	45	67	.....
133	40	40	16	56	40	.....	.....	.....	40	56	.....
134	27	27	15	33	27	.....	.....	.....	27	33	.....
135	22	22	8	22	22	8	.....	.....	22	22	.....
136	54	54	18	72	54	.....	.....	.....	54	72	.....
137	38	38	33	55	38	.....	.....	.....	38	55	.....
138	68	68	78	78	50	.....	.....	.....	68	78	.....
139	40	40	10	50	40	.....	.....	.....	40	50	.....
140	9	9	5	9	9	.....	.....	.....	9	9	.....
141	.....	25	11	36	25	.....	.....	.....	25	36	.....
142	.....	32	12	44	32	.....	.....	.....	32	44	.....
143	14	14	3	14	14	.....	.....	.....	14	14	.....
144	29	29	28	43	29	.....	.....	.....	29	43	.....
1	4,355	4,487	3,057	5,421	4,332	70	12	18	4,477	5,807	137
2	3,912	3,912	2,716	4,619	3,799	62	13	13	3,884	5,023	169
3	443	575	341	802	533	8	.....	5	593	784	.....
4	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	32
5	74.78	77.05	52.49	93.09	74.39	1.20	.20	.30	76.88	99.72	2.35

CONTINUATION

IV. TABLE K—ATTENDANCE OF

Continuation Schools	Lower School, Form I																								Lower					
	Boys											Girls													Boys					
	11 years	12 years	13 years	14 years	15 years	16 years	17 years	18 years	19 years	20 years	21 and over	11 years	12 years	13 years	14 years	15 years	16 years	17 years	18 years	19 years	20 years	21 and over	12 years	13 years	14 years	15 years	16 years	17 years
1 Aberfoyle	..	..	1	1	2	..	1	..	..	..	..	..	..	..	1	3	1	1	1	..	..	..	..	..	..	..	..	..
2 Acton	..	3	1	2	3	..	..	..	..	..	..	1	4	2	5	..	..	..	..	..	..	..	..	2	3	4	1	..
3 Agincourt	..	1	..	1	2	1	..	..	..	..	..	..	..	2	..	4	..	..	..	..	..	..	..	..	..	1	5	1
4 Ailsa Craig	..	..	1	1	2	..	..	..	..	..	..	1	..	3	4	2	..	1	..	..	..	..	1	1	2	..	1	1
5 Alvinston	..	1	2	4	4	1	..	..	..	..	..	..	..	..	5	8	1	1	..	..	..	..	..	..	2	1	..	1
6 Arkona	..	..	..	.	1	..	..	1	..	..	..	..	..	..	..	3	..	..	..	..	..	..	..	..	..	3	..	..
7 Ayr	..	..	3	3	5	2	1	2	..	..	..	..	..	1	4	2	2	1	..	..	..	..	..	..	..	..	..	2
8 Bancroft	..	..	..	2	2	2	..	..	..	..	..	..	..	3	2	2	..	..	..	..	..	..	..	..	..	..	1	1
9 Bath	..	..	1	2	1	..	..	..	..	..	..	..	..	..	1	2	1	1	1	..	..	..	..	..	..	1	..	2
10 Beaverton	..	..	..	3	2	1	1	..	..	..	..	..	..	..	1	5	1	..	1	..	..	..	..	..	..	..	4	3
11 Beeton	..	..	..	2	..	2	1	..	..	..	..	..	1	2	..	1	1	..	..	..	..	..	..	..	..	1	1	1
12 Belmont	..	..	..	6	2	..	..	..	..	..	..	..	..	..	5	12	4	..	..	..	..	..	..	..	1	4	2	..
13 Blenheim	..	2	2	2	4	5	4	..	..	..	..	1	3	4	6	1	1	2	1	..	..	..	..	..	..	3	3	2
14 Blind River	..	..	..	..	2	..	1	2	..	..	..	..	..	..	2	2	2	..	..	..	..	..	..	..	..	1	..	..
15 Blyth	..	2	2	1	..	..	..	..	..	..	..	..	1	3	4	2	1	..	..	..	..	..	..	1	..	1	..	1
16 Bolton	..	..	..	6	..	..	..	..	..	..	..	..	..	..	1	2	..	..	..	..	..	..	..	..	1	1	1	..
17 Bothwell	..	..	1	2	2	..	4	..	..	..	..	..	..	1	3	2	2	..	..	..	..	..	..	..	..	3	..	2
18 Bowesville	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	1	..
19 Bridgeburg	..	..	6	4	1	2	2	..	..	..	..	..	1	1	7	4	4	..	..	..	..	..	..	..	..	1	3	..
20 Bruce Mines	..	..	..	1	2	2	..	..	..	..	..	..	..	3	2	3	..	1	..	..	..	..	..	..	..	1	..	1
21 Brussels	..	..	1	2	4	..	2	..	..	..	..	..	..	2	3	7	2	..	..	..	..	..	..	..	1	2	3	..
22 Burk's Falls	..	..	..	2	2	2	..	..	..	..	..	..	1	1	6	2	3	3	..	..	..	..	..	..	..	1	2	1
23 Cannington	..	..	..	1	3	3	..	..	..	..	..	..	..	2	4	10	2	..	..	..	..	..	..	..	..	1	1	1
24 Cardinal	..	1	1	..	2	..	..	..	..	..	..	..	..	1	1	3	2	3	..	..	..	..	..	..	..	2	..	2
25 Carp	..	..	3	..	1	..	..	..	..	..	..	1	..	3	6	5	4	..	..	..	..	..	..	..	..	2	..	..
26 Chapleau	..	..	2	2	2	1	..	..	..	..	..	..	..	..	1	2	3	..	..	..	..	..	..	..	3	2	2	..
27 Claremont	..	..	2	..	2	1	..	..	..	..	..	..	..	4	3	3	..	1	..	..	..	..	..	..	1	2	1	..
28 Clifford	..	..	..	4	2	2	..	..	..	..	..	..	..	1	1	2	1	..	..	..	..	..	..	..	..	2	1	..
29 Cochrane	..	..	1	..	..	..	..	..	..	..	..	..	1	..	2	4	2	..	..	..	..	..	..	..	..	..	..	..
30 Coldwater	..	..	..	..	3	1	..	..	..	..	..	..	..	..	..	3	1	3	..	..	..	..	..	..	..	1	..	3
31 Comber	..	..	1	..	1	2	..	..	..	..	..	..	..	..	..	2	1	1	..	..	..	..	..	..	..	1	2	..
32 Cookstown	..	..	..	..	..	5	5	2	..	..	..	..	..	1	2	4	1	..	..	..	..	..	..	..	..	..	1	1
33 Creemore	..	..	..	3	3	..	2	..	..	..	..	..	..	2	2	3	2	1	..	..	..	..	..	..	..	3	2	1
34 Delaware	..	..	2	2	1	1	..	1	..	..	..	..	..	..	8	1	2	..	..	..	..	..	..	..	1	1	4	..
35 Delhi	..	..	1	1	1	4	..	..	..	..	..	..	1	3	3	3	1	..	..	..	..	..	..	..	..	1	..	1
36 Drayton	..	..	1	5	2	3	2	1	..	1	..	..	..	4	1	5	1	1	..	..	..	..	..	..	2	2	1	6
37 Dresden	..	..	6	5	2	..	..	..	..	..	..	..	..	3	4	3	2	..	..	..	..	..	..	..	2	4	..	..
38 Drumbo	..	..	1	1	2	1	..	..	..	..	..	..	..	1	..	2	..	..	1	..	..	..	..	..	2	..	..	1
39 Dryden	..	..	..	1	2	..	..	..	..	..	..	..	..	..	3	1	..	1	..	1	..	..	..	..	1	..	2	..
40 Eganville	..	1	..	2	..	..	..	..	..	..	..	..	..	4	2	1	1	..	..	..	..	..	..	..	1	2	1	..
41 Eganville	..	..	2	2	2	1	1	2	..	..	..	..	..	..	5	6	3	2	..	..	..	..	..	..	1	2	3	1
42 Elmira	..	..	6	6	5	3	1	..	..	..	..	..	..	2	2	11	3	1	..	..	1	1	..	..	3	..	2	1
43 Elmvale	..	..	..	3	..	1	1	..	..	..	..	..	..	..	3	1	3	1	..	..	..	..	..	..	..	1	2	3
44 Ennismore	..	..	1	1	3	..	..	..	..	..	..	..	..	2	1	3	..	..	..	..	..	..	..	..	..	1	..	..
45 Erin	..	..	..	..	1	..	1	..	..	..	..	..	..	4	3	3	1	..	1	..	..	..	..	..	..	2	2	..
46 Espanola	..	..	..	..	1	1	..	..	..	..	..	..	..	..	4	2	..	..	..	..	..	..	..	..	..	..	..	1
47 Fenelon Falls	..	..	..	6	6	3	..	..	..	..	..	..	..	..	4	2	5	1	..	..	..	..	1	..	..	1	1	..
48 Feversham	..	..	..	.	2	1	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..
49 Finch	..	..	4	2	4	1	..	..	..	..	..	..	1	4	1	5	..	1	..	..	..	..	..	..	7	2	3	..
50 Fingal	..	..	2	2	1	..	..	..	..	..	..	..	1	2	1	2	1	..	..	..	..	..	..	..	..	2	1	..
51 Frankford	..	..	..	2	1	3	1	..	..	..	..	..	..	..	..	3	2	2	..	..	..	..	..	..	..	1	..	1
52 Gore Bay	..	..	..	1	2	1	1	2	..	..	..	..	..	1	3	4	3	..	1	..	..	..	..	..	..	..	1	2
53 Grand Valley	..	..	1	4	1	1	..	..	..	..	..	..	2	2	1	4	..	..	..	..	..	..	..	..	1	3	1	..
54 Hanover	..	..	3	6	3	3	1	..	..	..	..	..	..	9	3	5	..	..	..	..	..	..	..	..	..	..	3	3
55 Harrow	..	..	1	2	6	..	..	..	..	..	..	..	..	..	3	4	4	1	..	..	..	..	..	..	..	..	2	1
56 Havelock	..	..	3	3	1	2	..	..	..	..	..	..	2	1	2	2	3	..	..	..	..	..	..	..	2	2	2	..
57 Hepworth	..	..	..	3	1	2	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	2	..	..	3

SCHOOLS (Continued)

PUPILS BY AGE, SEX AND GRADE

| School, Form II | | |

CONTINUATION

IV. TABLE K—ATTENDANCE OF PUPILS

Continuation Schools	Lower School, Form I																							Lower					
	Boys											Girls												Boys					
	11 years	12 year	13 years	14 years	15 years	16 years	17 years	18 years	19 years	20 years	21 and over	11 years	12 years	13 years	14 years	15 years	16 years	17 years	18 years	19 years	20 years	21 and over	12 years	13 years	14 years	15 years	16 years	17 years
58 Highgate		1	1	4	3	3							2	3	2	2	4	1						2	1	2	1	1
59 Huntsville			3	4	2	3								2	8	6	2									4	5	
60 Jarvis				1	1	1									7	5	1								2	3		2
61 Jockvale															1	3								1	1			
62 Kars					1										3	4		1									1	3
63 Keewatin				1	3	1									1	1	3	1								1		2
64 Kenmore				1	1	3	1							1	1	2	2	1	4						1	2		
65 Kinburn				2	2								1	2	4	5	1			1				1	1	1	2	1
66 Lakefield				1	2	1	1					1		1	8	6		1	1						1	4	1	3
67 Lanark		2	3	4	4	1							1	3	4	5			1						2	2	1	
68 Lansdowne				2	2	2	2							1	3	2	2									1		1
69 Lion's Head			1		1												3											
70 Little Current		1					1	1						1	1	2	3	2									1	1
71 Lobo				2	2	1	1	1						1	4	2	5		1						1	1	1
72 Lucknow				5	2	3		2							4	3	2	1							1	2	4	
73 Malakoff															1			1										1
74 Manitowaning			1	1	2										2	3	2	4	1								1	
75 Manotick				1		2									2	1	3	2								2	1	
76 Marmora				1	5	2	1	1			1			2	7	3	2								2	3	3	
77 Maxville			5	3	1	2	2						1	2	4	7	6	1										4
78 Melbourne			2		1								1	5	2		1							1		1	2	
79 Merlin		1	1	3	8	1							1		3		1							1		1	3	2
80 Merrickville					1	4	1							2	6	10	2	2									2	
81 Metcalfe			2	2		1	1							2	3	3	3	1								1		
82 Millbrook		1	5	5	2	2	1	2					1	3	5	7	5	2	1						1	1	1	1
83 Milverton				4	6	3								3	1	5									1	1	2	2
84 Mimico	2	4	7	3								4	7	11	2								1	4	4			
85 Minden				1											1	1	2	1	1							2	1	
86 Morriston				2										2	3	2	1		1									
87 Mt. Albert		1	2		2	2									8	1	1									2	1
88 Mt. Brydges			1	2	3	1							1	3	3	1	2	1								1	2	
89 Navan			2	2										4	1													2
90 New Hamburg			1	2	1	1		1						1	5	3	1							1	1	2	1	1
91 New Liskeard			1		3	1								2	6	4	8										2	
92 North Augusta		1			2	1								1	3	2	1									1	1	
93 North Gower					2	1	1		1							3		2									1	1
94 Norwich	1	2	7	10	4	1	3						2	3	5	4	1							1	5	3	7	1
95 Odessa				1		1								1	1	2		2								5	2	1
96 Oil Springs						2								1	2	3	1										1	
97 Orono			1	5		1		1					1	2	5	3	1								3	3	1	
98 Paisley		1		4	6	2	2						1	4	7	5	2									5		2
99 Pakenham			1	2	5	3								2	3	4								1		1	1	1
100 Palmerston			3	4	5	1								2	4	1	3									4	4	
101 Plattsville			2	2	3								1	3	5										2	2	1	
102 Port Burwell				1	2	1									3	2								1		1		
103 Port Colborne				6	10	5	1	1					1	1	4	7	4	3							2	5	4	1
104 Port Credit				1		2	2								2	7	2		1							2	1	2
105 Powassan			1	2	1	4		2						3	3	3	1	2							1		1	
106 Princeton		1		2		2									1	1	2											
107 Richard's Landing			1													2	1	2								1		1
108 Richmond		1		1	1	3	1						1	1	5	8	3											
109 Ridgeway			1	1	2	2	1						1	2	7	6	1	1							1	1	2	
110 Ripley				1	4	1	2							1	5	8	3		1						2	2	1	
111 Rodney		1	1	7	2		2						2	1	3	3									3	4	4	1
112 Russell		1	5	1	2								1	3		2	1		1						1	3		
113 St. George		2			3	3	1							2		3	3							1	1	4	3	2

SCHOOLS (Continued)

BY AGE, SEX AND GRADE (Continued)

| | School, Form II | | | | | | | | | | | | | | | | Middle School | | | | | | | | | | | | | | | |

CONTINUATION

IV. TABLE K—ATTENDANCE OF PUPILS

Continuation Schools	Lower School, Form I																						Lower					
	Boys											Girls											Boys					
	11 years	12 years	13 years	14 years	15 years	16 years	17 years	18 years	19 years	20 years	21 and over	11 years	12 years	13 years	14 years	15 years	16 years	17 years	18 years	19 years	20 years	21 and over	12 years	13 years	14 years	15 years	16 years	17 years
114 Schomberg			1	2	2	4								1	3	4										1	2	1
115 Scotland		2		2	1	1									1	3								1			1	1
116 Southampton					3	3	1							1	2	2	7								1	1	3	1
117 South Mountain				1	1	2	2							2	1	5									2	1	1	1
118 South Porcupine				3	4	1									1	3												
119 Spencerville				2	1		4						1	3	4	2	1	2							2	3		
120 Springfield				1	1	3							1		3	3	2									1	3	
121 Stayner				1	4	2	1								5	2	1									4	7	1
122 Stella				1										1	2	3									1			
123 Stouffville				3	2	5									5	4	3	1								1	4	1
124 Sturgeon Falls			1		2									2	2	2	3	2								1	1	
125 Sutton				4	2	3								4	3	4	3								1	2	1	
126 Tamworth		1			5		1								3	6	3	3	1						1	1	1	
127 Tara				2	1	2	1						1	3		2								1		4	1	
128 Tavistock			1	2	2										3	3	1	1								4	2	1
129 Teeswater			1	4	4			2							4	6	5	1									2	
130 Thamesville					2	4	1							1	3	2	2								1	2	2	
131 Thessalon				2		4	1								6		3	2	1	2			1		1		2	1
132 Thornbury		4	1	5	4	1	1							2	4	4				1					1			
133 Thorndale		1		3	5	3						1		1	6	4									1	1	1	1
134 Tilbury			1	3	2			1						2	3	3	2	1							1	1	1	
135 Timmins		1	2	2								1	1	4	2		1							1	3	2		
136 Tottenham			3	5	4	2								3	3	7	3	1							1	6	3	2
137 Warkworth			1	2	3	3	1							2	4	5	1											2
138 Westboro		3	3	1	8	6	1		1				1	2	4	11	7	2							2	2	3	1
139 West Lorne			2	2	3	1	1						1	3	6	4	2									2	3	
140 Westmeath					1		1								1		1											1
141 Westport				1	1	3	2							1	1	2	5	3										
142 Westport R.C.		2			2			1						2	2	4	3		3						1		1	1
143 Winona					5	2								1		2		1							1	1		
144 Wroxeter			1	3	2								1		4	4										2	2	

SUMMARY OF ATTENDANCE

		10 yrs.	11 yrs.	12 yrs.	13 yrs.
LOWER SCHOOL Form 1	Boys		3	46	144
	Girls		11	53	216
LOWER SCHOOL Form II	Boys			4	22
	Girls			4	35
MIDDLE SCHOOL	Boys				
	Girls				3
TOTALS BY SEXES	Boys		3	50	166
	Girls		11	57	254
GRAND TOTALS			14	107	420

SCHOOLS (Concluded)

BY AGE, SEX AND GRADE (Concluded)

| School, Form II | | | | | | | | | | | | | | | Middle School | | | | | | | | | | | | | | |

COLLEGIATE INSTITUTES

I. TABLE L—FINANCIAL

Collegiate Institutes	Legislative Grants	Municipal Grants(county)	Municipal Grants (local)	School Fees
	$ c.	$ c.	$ c.	$ c.
1 Barrie	1,251 83	3,308 10	15,095 90	2,259 00
2 Brantford	1,720 25	8,717 75	37,974 37	1,653 00
3 Brockville	1,480 40	5,061 95	25,500 00	796 00
4 Chatham	1,756 50	6,413 09	26,426 44	1,406 79
5 Clinton	1,033 35	6,500 40	4,200 00	1,175 25
6 Cobourg	1,712 68	5,500 50	12,700 00	.....
7 Collingwood	1,778 40	3,612 13	16,833 45	360 00
8 Fort William	2,354 33	.....	43,208 08	368 00
9 Galt	1,766 00	12,569 15	17,400 00	4,235 50
10 Goderich	946 06	5,194 10	8,500 00	1,311 00
11 Guelph	1,259 10	.....	21,995 89	3,519 04
12 Hamilton	2,575 64	.....	122,710 41	12,852 25
13 Ingersoll	1,548 07	3,351 94	12,751 00	972 00
14 Kingston	1,265 00	.....	33,495 00	9,554 06
15 Kitchener-Waterloo	1,733 75	3,921 18	29,001 34	3,546 00
16 Lindsay	1,558 50	10,113 71	16,474 51	2,824 50
17 London	3,926 18	13,349 99	100,421 92	6,891 50
18 Morrisburg	833 46	4,296 93	3,887 28	.....
19 Napanee	1,058 56	6,182 02	7,368 00	.....
20 Niagara Falls	1,801 08	3,871 22	32,611 40	.....
21 North Bay	2,660 00	.....	27,000 00	.....
22 Orillia	1,194 06	3,683 51	27,107 95	2,834 00
23 Ottawa	1,633 00	.....	119,042 49	20,810 25
24 Owen Sound	1,769 75	5,810 69	13,980 00	2,580 57
25 Perth	1,137 55	4,581 71	7,823 01	923 38
26 Peterborough	1,070 00	.....	41,500 00	2,660 50
27 Picton	1,385 73	9,792 05	10,000 00	.....
28 Port Arthur	3,443 75	.....	27,180 77	.....
29 Renfrew	1,357 50	8,273 55	11,400 00	15 00
30 St. Catherines	1,112 00	4,913 07	30,119 78	2,075 90
31 St. Mary's	1,121 53	2,284 39	9,020 00	1,765 00
32 St. Thomas	1,740 34	8,429 12	31,421 03	1,016 00
33 Sarnia	1,295 57	3,299 34	40,633 73	.....
34 Seaforth	995 38	6,772 75	5,040 47	1,525 40
35 Smith's Falls	1,818 93	2,132 78	12,975 00	611 00
36 Stratford	2,092 24	3,812 60	27,000 00	2,909 50
37 Strathroy	1,099 65	4,248 80	7,500 00	1,395 00
38 Toronto, Harbord	1,697 27	.....	38,080 50	6,377 94
39 Toronto, Humberside	1,267 50	.....	60,700 28	4,935 00
40 Toronto, Jarvis	1,767 66	.....	62,260 20	4,978 92
41 Toronto, Malvern Ave	1,159 00	.....	42,775 40	2,569 21
42 Toronto, Oakwood	1,178 52	.....	78,052 59	7,235 60
43 Toronto, Parkdale	1,146 50	.....	60,973 62	5,352 00
44 Toronto, Riverdale	1,238 50	.....	67,566 24	3,808 00
45 Vankleek Hill	1,157 35	5,154 52	6,500 00	74 00
46 Windsor	1,627 23	6,547 16	74,927 44	.....
47 Woodstock	1,892 00	8,067 78	23,466 82	3,074 06
Totals	74,417 65	189,767 98	1,552,602 31	133,250 12

AND HIGH SCHOOLS

STATEMENT

	ceipts			Expenditure		
	Debentures	Balances and other sources	Total Receipts	Teachers' Salaries	Buildings, Sites and all permanent improvements	Repairs to school accommodations
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
1	.....	2,338 92	24,253 75	15,066 11	945 51	242 34
2	.....	334 00	50,399 37	38,650 84	627 27	2,186 75
3	.....	394 70	33,233 05	19,486 65	.....	1,409 69
4	.....	1,627 38	37,630 20	24,421 20	.....	1,190 15
5	.....	1,215 44	14,124 44	9,581 52	.....	427 91
6	.....	5,484 57	25,397 75	14,560 00	24 00	468 74
7	.....	1,082 35	23,666 33	16,180 00	.....	386 55
8	27,835 02	3,745 51	77,510 94	31,640 00	34,899 15	344 14
9	6,775 00	2,444 87	45,190 52	24,988 68	7,187 95	112 61
10	.....	1,494 35	17,445 51	11,490 00	283 00	687 36
11	.....	443 24	27,217 27	21,346 25	.....	576 68
12	.....	11,296 70	149,435 00	70,406 20	7,830 47	3,209 84
13	.....	2,664 55	21,287 56	14,230 00	115 43	388 47
14	.....	3,187 86	47,501 92	36,196 62	132 02	1,720 16
15	.....	3,173 29	41,375 56	23,546 75	36 74	2,123 31
16	.....	908 35	31,879 57	24,029 00	721 52	742 23
17	.....	81,827 67	206,417 26	82,363 50	34,804 24	2,660 59
18	.....	2,803 53	11,821 20	8,310 00	.....	633 63
19	.....	5,815 29	20,423 87	10,960 00	200 45	8 48
20	.....	2,243 42	40,527 12	25,890 00	1,610 12	1,368 09
21	.....	719 69	30,379 69	18,344 36	594 56	363 93
22	.....	386 65	35,206 17	16,573 21	.....	4,552 50
23	.....	16,359 01	157,844 75	99,525 00	2,607 73	2,258 84
24	.....	10,312 83	34,453 84	25,096 50	534 49	723 89
25	.....	3,256 82	17,722 47	10,420 00	79 17	286 96
26	.....	1,735 01	46,965 51	32,073 50	.....	2,729 95
27	.....	8,352 52	29,530 30	14,636 35	345 35	252 49
28	.....	888 39	31,512 91	19,302 75	66 00	955 11
29	.....	2,509 65	23,555 70	16,952 75	.....	1,074 33
30	5,000 00	1,198 66	44,419 41	26,941 48	2,029 12	468 08
31	.....	732 43	14,923 35	11,783 00	.....	186 75
32	.....	810 70	43,417 19	35,580 00	341 96	771 40
33	.....	3,812 98	49,041 62	26,603 61	9,633 73	645 88
34	.....	2,658 39	16,992 39	10,976 22	.....	137 55
35	.....	6,283 03	23,820 74	16,391 10	.....	879 08
36	.....	9,797 95	45,612 29	30,245 36	.....	1,041 68
37	.....	1,009 25	15,252 70	10,575 00	.....	36 79
38	.....	168,380 54	214,536 25	60,133 25	2,465 00	6,196 39
39	.....	11,618 97	78,521 75	51,970 68	2,465 00	3,126 66
40	.....	185 79	69,192 57	48,224 80	2,465 00	5,730 18
41	.....	2,111 70	48,615 31	31,356 20	2,465 00	2,092 39
42	.....	13,004 50	99,471 21	65,042 16	2,465 00	3,838 49
43	.....	134,164 18	201,636 30	52,574 70	136,679 18	4,602 62
44	.....	2,334 65	74,947 39	50,210 70	2,465 00	6,436 73
45	.....	6,470 45	19,356 32	10,003 87	.....	803 49
46	.....	4,627 08	87,728 91	45,632 05	.....	7,958 54
47	.....	133 39	36,634 05	22,242 50	601 74	393 00
	39,610 02	548,381 20	2,538,029 28	1,382,754 42	257,720 90	79,431 42

COLLEGIATE INSTITUTES

I. TABLE L—FINANCIAL

Collegiate Institutes	Expenditure— Library, scientific apparatus maps, etc., typewriters, and equipment for physical culture	Art, manual training, household science and agricultural department equipment	School books, stationery, prizes, fuel, examinations and all other expenses
	$ c.	$ c.	$ c.
1 Barrie	1,167 75	.....	4,958 17
2 Brantford	745 51	70 04	8,118 96
3 Brockville	99 39	198 85	10,403 38
4 Chatham	1,149 79	7 63	10,949 99
5 Clinton	204 10	157 39	2,047 01
6 Cobourg	136 56	289 21	4,397 39
7 Collingwood	.....	263 33	6,694 87
8 Fort William	110 00	1,108 67	8,992 99
9 Galt	740 77	1,023 77	9,908 66
10 Goderich	305 08	.....	1,732 18
11 Guelph	623 90	.....	4,670 44
12 Hamilton	1,560 10	304 42	19,022 82
13 Ingersoll	76 36	55 10	5,137 05
14 Kingston	534 58	.....	8,918 54
15 Kitchener-Waterloo	567 71	48 10	11,136 04
16 Lindsay	698 15	.....	5,309 94
17 London	1,644 25	35 00	28,070 10
18 Morrisburg	181 81	.....	2,414 12
19 Napanee	429 93	.....	2,775 05
20 Niagara Falls	190 40	.....	11,468 51
21 North Bay	406 91	29 50	10,528 44
22 Orillia	142 70	.....	7,331 14
23 Ottawa	324 70	.....	47,467 82
24 Owen Sound	180 48	176 93	7,741 55
25 Perth	.....	.....	4,148 69
26 Peterborough	1,359 47	53 35	9,416 40
27 Picton	429 28	.....	4,418 42
28 Port Arthur	384 86	1,196 23	6,470 12
29 Renfrew	338 65	250 00	4,939 97
30 St. Catharines	335 25	35 10	13,924 41
31 St. Mary's	45 58	.....	2,816 90
32 St. Thomas	.....	.....	6,723 83
33 Sarnia	1,963 47	.....	9,749 17
34 Seaforth	.....	.....	2,543 95
35 Smith's Falls	21 65	.....	6,428 39
36 Stratford	913 68	.....	13,154 95
37 Strathroy	186 67	.....	4,305 44
38 Toronto, Harbord	164 98	26 95	13,734 76
39 Toronto, Humberside	164 00	.....	20,795 41
40 Toronto, Jarvis	147 76	.....	12,624 83
41 Toronto, Malvern Ave	196 33	19 50	12,485 89
42 Toronto, Oakwood	144 48	5,197 93	22,783 15
43 Toronto, Parkdale	50 65	11 48	7,717 67
44 Toronto, Riverdale	141 11	5,194 85	8,164 35
45 Vankleek Hill	310 13	55 60	2,098 70
46 Windsor	.....	.....	30,516 54
47 Woodstock	.....	133 71	12,440 82
Totals	19,518 93	15,942 64	472,597 92

AND HIGH SCHOOLS (Continued)

STATEMENT (Continued)

Continued

	Total expenditure		Charges per year for Tuition
	$	c.	
1	22,379	88	$10.
2	50,399	37	Res. free; Co. $12; others $30.
3	31,597	96	$5.
4	37,718	76	Res. free; non-res. $10.
5	12,417	93	Lower School $6; others, $10.
6	19,875	90	Free.
7	23,524	75	Res. free; non-res. $10.
8	77,094	95	Free.
9	43,962	44	Co. $10; res. and other Cos. $14.
10	14,497	62	F. I, $6; II, $8; III, $10.
11	27,217	27	Res. free; non-res. $10.
12	102,333	85	Res. 1st yr. $2.50, other yrs. $10; Co. $50; others $85.
13	20,002	41	Res. F. I, free; others $7.50.
14	47,501	92	Res.I, fr. II&IIICom. fr., others $15; non-r. Frontenac & Leeds $5, others $30.
15	37,458	65	Res. $10; non-res. $15.
16	31,500	84	Res. $5.70 to $10; non-res. $7.50 to $20.
17	149,577	68	Res. I, free, other years and Co. $10; others $30.
18	11,539	56	Free.
19	14,373	91	Free.
20	40,527	12	Free.
21	30,267	70	Free.
22	28,599	55	$10.
23	152,184	09	Res. $10 to $25; non-res. $60 to $75.
24	34,453	84	Res. I, free, II, $8; other years. $12; non-res. $10.
25	14,934	82	Co. $10; non-res. $40.
26	45,632	67	Res. $3 to $10; non-res. $25.
27	20,081	89	Free.
28	28,375	07	Free.
29	23,555	70	Res. and Co. free; others $25.
30	43,733	44	$5.
31	14,832	23	$10.
32	43,417	19	Res. free; non-res. $10.
33	48,595	86	Free.
34	13,657	72	F. I, $6; II. $8; others $10.
35	23,720	22	Res. free; non-res. $10.
36	45,355	67	Res. F. I, free; all others $10
37	15,103	90	Res. F. I, free; all others $10
38	82,721	33	
39	78,521	75	
40	69,192	57	
41	48,615	31	
42	99,471	21	Res. I, free; II, $9; III, $15; IV, $21; V, $27; non-res, cost per pupil.
42	99,471	21	
43	201,636	30	
44	72,612	74	
45	13,271	79	Free to Province; others $20.
46	84,107	13	Res. and Co. free; others $67
47	35,811	7	Res. F. I, free; all others $7.50.
	2,227,966	23	18 free; 29 not free.

COLLEGIATE INSTITUTES

I. TABLE L—FINANCIAL

High Schools	Legislative Grants	Municipal Grants (county)	Municipal Grants (Local)	School Fees	Re-
	$ c.	$ c.	$ c.	$ c.	
1 Alexandria	757 27	747 43	6,537 00		
2 Alliston		2,149 26	2,000 00	572 50	
3 Almonte	602 92	2,233 81	6,529 06	549 25	
4 Amherstburg	529 00	1,557 51	5,850 00	62 50	
5 Arnprior	862 99	2,650 19	7,749 63	12 50	
6 Arthur	762 61	2,589 97	4,107 03	700 80	
7 Athens	913 51	4,224 00	4,300 00	367 50	
8 Aurora	766 42	3,031 16	2,500 00	941 00	
9 Avonmore	592 99	821 24	4,230 52		
10 Aylmer	794 02	5,217 95	2,000 00	913 00	
11 Beamsville	2,545 41	6,718 81	1,685 40		
12 Belleville	1,641 54	4,897 55	26,936 55		
13 Bowmanville	865 48	2,719 70	6,425 00	288 40	
14 Bracebridge	1,200 36		6,525 00	577 00	
15 Bradford	595 78	1,829 71	1,000 00	395 94	
16 Brampton	1,146 97	4,446 00	8,500 00	1,584 00	
17 Brighton	613 09	3,144 89	3,100 00		
18 Burlington	581 90	1,974 21	5,100 00	619 80	
19 Caledonia	638 73	3,763 11	2,500 00	810 55	
20 Campbellford	772 40	4,013 08	6,600 00		
21 Carleton Place	629 21	1,270 94	4,300 00	526 00	
22 Cayuga	618 75	3,243 39	2,000 00		
23 Chatsworth	450 43	450 43	3,137 78	175 00	
24 Chesley	613 85	1,983 97	3,300 00	1,349 50	
25 Chesterville	650 09	6,127 01			
26 Colborne	510 78	1,879 88	2,607 00		
27 Cornwall	1,210 07	7,221 32	9,500 00	727 76	
28 Deseronto	682 49	3,146 56	3,500 00		
29 Dundalk	516 82	1,942 21	2,500 00	574 00	
30 Dundas	935 72	2,281 44	10,050 00	792 00	
31 Dunnville	908 95	5,146 69	4,750 00		
32 Durham	643 52	2,295 87	2,363 75	1,111 42	
33 Dutton	621 84	3,630 26	1,000 00	990 00	
34 Elora	491 52	2,621 41	1,600 00	373 00	
35 Essex	792 13	4,883 95	4,000 00		
36 Exeter	547 29	2,712 13	2,350 00	519 00	
37 Fergus	601 14	2,290 87	4,000 00	588 00	
38 Flesherton	561 48	561 48	5,013 00	221 25	
38 Forest	639 51	3,854 41	1,500 00		
40 Fort Frances	1,337 36		8,800 00		
41 Gananoque	919 96	1,931 32	6,382 48	140,00	
42 Georgetown	820 73	4,162 74	4,388 42	1,033 30	
43 Glencoe	538 60	2,740 31	2,500 00	532 00	
44 Gravenhurst	1,212 94		3,813 44	228 15	
45 Grimsby	615 78	4,925 29	1,421 18		
46 Hagersville	579 91	3,151 96	2,200 00		
47 Haileybury	1,568 54		5,751 00	4,122 60	
48 Harriston	693 16	2,189 34	4,141 00	820 00	
49 Hawkesbury	633 38	1,645 42	3,851 90		
50 Iroquois	618 96	3,683 71	2,000 00		
51 Kemptville	700 39	5,741 84	3,000 00	329 10	
52 Kenora	1,937 80		12,667 38		
53 Kincardine	889 97	4,071 75	4,038 76	1,222 00	
54 Leamington	986 94	4,227 00	7,026 00		
55 Listowel	912 17	57 46	3,790 00	1,255 00	
56 Lucan	597 73	2,672 65	2,500 00	726 00	
57 Madoc	656 31	4,339 18	2,200 00		

AND HIGH SCHOOLS (Continued)

STATEMENT (Continued)

	ceipts			Expenditure		
	Debentures	Balances and other sources	Total Receipts	Teachers' Salaries	Buildings, Sites and all permanent improvements	Repairs to school accommodations
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
1	.....	1,137 48	9,179 18	5,760 00	341 64	.....
2	.....	543 39	5,265 15	4,050 00	.....	.....
3	.....	1,163 46	11,078 50	6,260 00	650 00	.....
4	.....	474 45	8,473 46	4,170 00	3,850 00	.....
5	1,143 42	2,069 15	14,487 88	9,761 78	25 00	160 66
6	.....	517 03	8,677 44	6,137 50	109 01	81 05
7	.....	3,566 99	13,372 00	7,550 00	.....	41 90
8	.....	1,535 48	8,774 06	6,750 00	.....	225 48
9	.....	1,161 97	6,806 72	3,980 00	.....	195 50
10	.....	640 96	9,565 93	6,510 00	.....	182 27
11	.....	5,095 45	16,045 07	5,784 00	1,505 95	199 76
12	.....	418 45	33,894 09	26,911 24	.....	708 84
13	.....	1,048 30	11,346 88	7,519 49	.....	312 86
14	.....	43 39	8,345 75	6,260 00	1,711 79	.....
15	.....	803 46	4,624 89	3,530 00	.....	101 33
16	.....	179 54	15,856 51	11,660 00	.....	.....
17	.....	312 61	7,170 59	4,695 00	.....	56 85
18	.....	221 77	8,497 68	4,879 00	900 00	32 45
19	.....	404 72	8,117 11	4,720 00	311 45	636 32
20	5,730 47	1,969 59	19,085 54	8,497 00	4,761 80	142 68
21	.....	1,380 28	8,106 43	5,730 00	.....	194 14
22	.....	705 50	6,567 64	5,590 00	.....	21 15
23	.....	1,287 59	5,501 23	2,875 40	.....	56 23
24	.....	949 99	8,197 31	5,916 00	.....	.....
25	.....	112 40	6,889 50	4,392 50	104 87	247 85
26	.....	3,549 21	8,546 87	3,186 70	.....	98 03
27	.....	5,156 97	23,816 12	14,795 00	.....	360 53
28	.....	187 16	7,516 21	4,293 25	.....	437 81
29	.....	406 62	5,939 65	4,030 00	.....	244 19
30	.....	406 36	14,465 52	7,962 69	2,600 00	166 53
31	.....	2,938 01	13,743 65	8,294 63	.....	150 44
32	.....	856 86	7,271 42	5,345 00	208 86	41 00
33	.....	1,811 89	8,053 99	5,660 00	485 51	.....
34	.....	204 07	5,290 00	3,650 00	.....	243 97
35	.....	3,533 94	13,210 02	9,135 50	2,110 90	.....
36	.....	343 32	6,471 74	4,700 00	172 32	32 84
37	.....	1,641 57	9,121 58	5,780 00	43 80	143 45
38	.....	1,262 38	7,619 59	3,930 00	739 32	124 13
39	.....	1,622 46	7,616 38	4,520 00	230 83	.....
40	.....	41 00	10,178 36	5,250 00	1,834 50	106 12
41	.....	103 00	9,476 76	6,851 00	225 99	522 92
42	.....	218 55	10,623 74	7,980 00	61 54	258 21
43	.....	483 52	6,794 43	4,320 00	172 65	.....
44	.....	38 68	5,293 21	4,126 66	.....	26 10
45	.....	165 50	7,127 75	4,620 00	.....	181 08
46	.....	1,219 09	7,150 96	5,264 74	.....	45 49
47	.....	6,563 31	18,005 45	6,920 00	.....	68 56
48	.....	456 40	8,301 90	6,039 75	.....	195 29
49	.....	34 00	6,164 70	4,240 00	144 20	.....
50	.....	2,098 38	8,401 05	5,120 00	.....	147 45
51	.....	1,416 91	11,188 24	6,600 00	.....	381 33
52	.....	210 50	14,815 68	9,098 00	330 00	94 00
53	.....	1,524 31	11,746 79	7,920 00	.....	165 13
54	.....	2,939 61	15,179 55	9,560 00	954 92	462 75
55	.....	7,666 00	13,680 63	9,492 99	.....	840 60
56	.....	2,443 76	8,940 14	5,895 61	.....	108 26
57	.....	1,120 28	8,315 77	6,000 00	87 04	84 15

COLLEGIATE INSTITUTES

I. TABLE L—FINANCIAL

Expenditure

High Schools	Library, scientific apparatus maps, etc., typewriters, and equipment for physical culture	Art, manual training, household science and agricultural department equipment	School books, stationery, prizes, fuel, examinations and all other expenses
	$ c.	$ c.	$ c.
1 Alexandria	12 50		2,279 45
2 Alliston			1,209 80
3 Almonte			500 00
4 Amherstburg	38 81		292 48
5 Arnprior	37 62		2,840 68
6 Arthur		55 05	2,171 75
7 Athens	146 41	34 63	2,158 10
8 Aurora	108 46		1,584 59
9 Avonmore	190 12		1,584 67
10 Aylmer	151 94		2,141 57
11 Beamsville	226 71		8,019 04
12 Belleville	401 46		5,578 98
13 Bowmanville	386 95	114 00	2,979 64
14 Bracebridge	119 47		230 27
15 Bradford			984 76
16 Brampton	325 72		3,796 00
17 Brighton	348 31		1,569 12
18 Burlington	227 00		1,131 45
19 Caledonia	585 92		1,863 42
20 Campbellford	650 94		2,486 76
21 Carleton Place	76 39		2,000 39
22 Cayuga	29 30		778 51
23 Chatsworth	15 00		1,118 02
24 Chesley	325 60		1,863 50
25 Chesterville			1,781 86
26 Colborne	50 00		1,364 98
27 Cornwall			6,200 72
28 Deseronto			2,566 62
29 Dundalk	51 97		1,503 62
30 Dundas	421 45		3,254 07
31 Dunnville	232 25		2,494 58
32 Durham	77 49		1,599 07
33 Dutton			928 59
34 Elora	67 30		942 71
35 Essex	79 34	132 50	1,751 78
36 Exeter	28 14		1,244 98
37 Fergus	78 63		1,421 49
38 Flesherton	26 59		2,277 70
39 Forest			1,608 60
40 Fort Frances	500 13		1,696 75
41 Gananoque			1,817 09
42 Georgetown	154 04	121 15	2,048 80
43 Glencoe			1,350 55
44 Gravenhurst	52 25		1,061 44
45 Grimsby	244 76		1,998 91
46 Hagersville	45 50	10 00	1,785 23
47 Haileybury			5,614 43
48 Harriston	585 22		1,481 64
49 Hawkesbury	88 10		1,692 40
50 Iroquois	49 00		1,535 85
51 Kemptville	92 29		2,037 35
52 Kenora	375 16		4,918 52
53 Kincardine	96 67	91 09	2,086 63
54 Leamington	208 38	113 54	2,876 23
55 Listowel	37 10		3,309 94
56 Lucan		31 46	1,904 81
57 Madoc	90 98		1,395 52

AND HIGH SCHOOLS (Continued)

STATEMENT (Continued)

—Continued

	Total Expenditure		Charges per year for Tuition
	$	c.	
1	8,393	59	Res. & Co. free; others $20.
2	5,259	80	Res. $5; non-res. $10.
3	7,410	00	Res. $2.50; others, $12.50.
4	8,351	29	Res. free; non-res. $10.
5	12,825	74	Res. free; non-res. $25.
6	8,554	36	$10.
7	9,931	04	Res. free; Co. $5; others, $30.
8	8,668	53	$10.
9	5,950	29	Free.
10	8,985	78	Res. F. I, $5; all others $10.
11	15,735	46	Free.
12	33,600	52	Res. free; non-res. $25.
13	11,312	94	Res. F. I free, II $6, other F's $7.50; non-res. free.
14	8,321	53	Res. free; non-res. I $20, II $25, III, $30.
15	4,616	09	F. I, free; others $10.
16	15,781	72	$10.
17	6,669	28	Free.
18	7,169	90	$10.
19	8,117	11	Res. free; non-res. $4.50
20	16,539	18	Free.
21	8,000	92	Res. free; non-res. $10.
22	6,418	96	Free.
23	4,064	65	F. I, free; all others, $10.
24	8,105	10	F. I, $10; II, $15; III, $20; IV, $50.
25	6,527	08	Free.
26	4,699	71	Free.
27	21,356	25	Free.
28	7,297	68	Free.
29	5,829	78	$10.
30	14,404	74	Res. F. I free, others $10; non-res. $30.
31	11,171	90	Free.
32	7,271	42	Res. $7.50; non-res. $10.
33	7,074	10	$10.
34	4,903	98	Res. $5; non-res. $10.
35	13,210	02	Free.
36	6,178	28	Res. F. I, free; all others $10.
37	7,467	37	Res. free; non-res. $10.
38	7,097	74	Res. F. I free, II $5, III, $7.50; non-res. $10.
39	6,359	43	Free.
40	9,387	50	Free.
41	9,417	00	Res. free; non-res. $5.
42	10,623	74	$10.
43	5,843	20	$10.
44	5,266	45	F. I, $5; others $10.
45	7,044	75	Free.
46	7,150	96	Free.
47	12,602	99	Res. free; Cobalt and Coleman Tp. cost per pupil; others $30
48	8,301	90	Res. F. I, free; others $10.
49	6,164	70	Free.
50	6,852	30	Free.
51	9,110	97	Res. free; non-res. $5.
52	14,815	68	Free.
53	10,359	52	Res. $8; non-res. $10.
54	14,175	82	Free.
55	13,680	63	Res. F. I, $7; all others $10.
56	7,940	14	$10.
57	7,657	69	Free.

COLLEGIATE INSTITUTES

I. TABLE L—FINANCIAL

High Schools	Legislative Grants	Municipal Grants (county)	Municipal Grants (local)	School Fees Re-
	$ c.	$ c.	$ c.	$ c.
58 Markdale	450 00	450 00	3,083 28	453 00
59 Markham	635 33	3,965 34	1,900 00	991 00
60 Meaford	1,043 81	2,496 40	6,000 00	975 83
61 Midland	817 22	1,541 57	9,100 00	554 05
62 Milton	509 77	1,500 25	2,500 00	915 00
63 Mitchell	689 48	4,215 04	3,500 00	699 50
64 Morewood	495 48	763 76	4,476 39	.....
65 Mount Forest	660 10	742 31	3,900 00	517 25
66 Newburgh	526 06	3,940 80	800 00	.....
67 Newcastle	449 04	1,314 59	1,510 20	.....
68 Newmarket	49 50	4,847 94	11,000 00	1,640 00
69 Niagara	484 72	800 00	2,490 00	.....
70 Niagara Falls South	1,208 40	1,038 15	13,238 34	.....
71 Norwood	605 88	1,660 41	2,935 34	553 80
72 Oakville	2,069 87	5,283 93	3,619 74	887 02
73 Omemee	429 93	1,107 10	2,243 87	221 00
74 Orangeville	929 52	5,009 78	6,000 00	1,337 00
75 Oshawa	1,166 95	2,754 02	16,200 00	47 50
76 Paris	767 97	2,522 73	6,000 00	175 78
77 Parkhill	598 14	2,492 33	2,800 00	866 50
78 Parry Sound	1,289 84	.....	6,700 00	191 50
79 Pembroke	1,044 32	2,717 52	12,300 00	.....
80 Penetanguishene	735 05	735 05	5,510 70	.....
81 Petrolia	626 98	4,904 94	4,000 00	.....
82 Plantagenet	517 69	750 63	4,500 00	170 00
83 Port Dover	476 91	1,011 36	1,841 46	.....
84 Port Elgin	551 26	2,478 45	2,300 00	414 50
85 Port Hope	1,050 54	4,310 40	6,043 41	792 50
86 Port Perry	3,102 79	4,829 79	1,218 64	308 75
87 Port Rowan	479 37	1,221 41	1,764 36	.....
88 Prescott	719 55	1,416 26	6,105 30	130 00
89 Richmond Hill	584 87	2,820 30	2,000 00	655 00
90 Ridgetown	762 90	3,696 32	3,250 00	759 00
91 Rockland	576 16	2,371 66	1,360 21	.....
92 Sault Ste. Marie	2,133 56	.....	30,179 92	3,058 00
93 Shelburne	550 31	1,645 31	3,100 00	464 00
94 Simcoe	850 84	4,896 84	4,274 27	.....
95 Smithville	538 64	2,450 61	2,250 00	.....
96 Stirling	610 33	2,780 20	2,422 07	.....
97 Streetsville	536 35	2,483 68	1,700 00	353 00
98 Sudbury	2,055 06	.....	17,037 26	80 00
99 Sydenham	740 34	6,400 00	.....	613 00
100 Thorold	586 14	1,163 84	5,250 00	.....
101 Tillsonburg	875 27	2,089 21	7,000 00	875 00
102 Toronto, Commerce	3,877 06	.....	142,772 00	6,679 07
103 Toronto, Davenport	.....	.....	11,386 30	25 00
103 Toronto, North	1,109 30	.....	43,931 98	2,377 36
105 Trenton	979 46	2,892 62	7,000 00	.....
106 Tweed	623 12	2,832 49	2,450 00	.....
107 Uxbridge	691 47	3,798 14	4,000 00	1,028 33
108 Vienna	427 29	1,124 73	1,700 00	.....
109 Walkerton	774 13	2,217 75	4,100 00	588 00
110 Wallaceburg	744 94	2,420 16	6,000 00	216 00
111 Wardsville	425 80	1,693 16	967 29	203 25
112 Waterdown	534 18	1,134 18	3,000 00	521 00
113 Waterford	573 79	2,313 13	2,800 00	.....
114 Watford	668 80	7,886 97	2,000 00	276 00
115 Welland	1,008 89	5,596 74	10,000 00	.....

AND HIGH SCHOOLS (Continued)

STATEMENT (Continued)

	ceipts			Expenditure		
	Debentures	Balances and other sources	Total Receipts	Teachers' Salaries	Buildings, sites and all permanent improvements	Repairs to school accommodations
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
58	..	2,240 66	6,676 94	3,011 82	37 80	34 50
59	.....	1,085 41	8,577 08	6,028 00	.....	91 66
60	.....	1,321 38	11,837 42	9,230 75	.....	.....
61	.....	2,237 62	14,250 46	9,242 00	1,864 75	.....
62	45,500 00	308 56	51,233 58	4,006 75	43,000 52	.....
63	.....	129 50	9,233 52	5,738 00	.....	391 94
64	.....	4,496 12	10,231 75	3,117 00	31 10	.....
65	.....	1,984 01	7,803 67	5,176 95	633 67	65 35
66	.....	2,544 89	7,811 75	3,680 00	.....	68 86
67	.....	25 57	3,299 40	2,311 68	.....	105 86
68	.....	272 40	17,809 84	12,117 68	215 55	362 70
69	.....	59 57	3,834 29	2,860 14	.....	85 73
70	.....	11,322 47	26,807 36	10,101 38	930 91	316 59
71	.....	1,117 68	6,873 11	4,420 00	.....	76 32
72	.....	2,874 96	14,735 52	6,365 00	.....	456 18
73	.....	179 43	4,181 33	2,430 00	60 00	.....
74	.....	1,690 42	14,966 72	8,920 00	.....	116 36
75	.....	2,740 46	22,908 93	14,378 20	.....	800 96
76	.....	1,625 98	11,092 46	8,180 00	348 85	332 69
77	.....	708 05	7,465 02	5,325 13	.....	298 37
78	.....	23 65	8,204 99	5,220 00	.....	38 39
79	.....	396 56	16,458 40	12,654 00	240 05	32 87
80	.....	210 92	7,191 72	4,717 04	.....	13 83
81	.....	501 60	10,033 52	6,312 91	.....	500 30
82	.....	3,541 57	9,479 89	3,820 00	375 00	.....
83	.....	58 50	3,388 23	2,760 00	.....	1 63
84	.....	92 28	5,836 49	3,970 00	497 23	.....
85	.....	1,240 62	13,437 47	9,083 30	.....	145 99
86	.....	142 20	9,602 17	7,450 00	151 50	171 92
87	.....	.....	3,465 14	2,447 50	.....	141 54
88	.....	428 26	8,799 37	6,060 30	22 30	260 00
89	.....	103 90	6,164 07	4,540 00	.....	12 10
90	.....	1,183 76	9,651 98	7,840 00	.....	181 27
91	.....	1,394 59	5,702 62	3,820 00	.....	16 10
92	.....	1,577 05	36,948 53	24,310 10	4,125 00	435 84
93	.....	133 20	5,892 82	4,500 00	.....	29 96
94	.....	163 60	10,185 55	8,161 31	.....	1,109 06
95	.....	4,329 47	9,568 72	4,094 20	.....	125 33
96	.....	2,771 65	8,584 25	4,404 00	276 27	.....
97	.....	16 55	5,089 58	3,820 00	.....	25 50
98	.....	5,769 20	24,941 52	12,980 00	815 72	4,880 34
99	.....	752 42	8,505 76	6,350 75	.....	134 07
100	.....	685 14	7,685 12	5,215 64	462 14	.....
101	.....	366 84	11,206 32	8,310 00	171 60	.....
102	.....	16,810 29	170,138 42	81,317 67	1,770 36	3,107 17
103	.....	.....	11,411 30	5,967 00	615 99	2,412 64
104	.....	30,524 22	77,942 86	28,937 26	21,809 18	9,473 15
105	.....	6,660 12	17,532 20	9,100 00	.....	895 47
106	.....	2,862 99	8,768 60	4,360 00	222 63	.....
107	.....	31 59	9,549 53	7,380 22	.....	31 25
108	.....	707 88	3,959 90	2,300 96	19 03	.....
109	.....	2,236 09	9,915 97	6,600 00	135 20	10 15
110	.....	1,933 68	11,314 78	7,158 00	650 00	82 32
111	.....	142 66	3,432 16	2,450 00	42 93	23 13
112	.....	315 48	5,504 84	3,920 00	.....	207 40
113	.....	2,302 03	7,988 95	4,020 00	1,557 24	.....
114	.....	728 39	11,560 16	6,484 26	9 67	242 26
115	.....	2,261 86	18,867 49	11,980 03	428 08	134 28

COLLEGIATE INSTITUTES

I. TABLE L—FINANCIAL

High Schools	Expenditure— Library, scientific apparatus maps, etc., typewriters, and equipment for physical culture	Art, manual training, household science and agricultural department equipment	School books, stationery, prizes, fuel, examinations and all other expenses
	$ c.	$ c.	$ c.
58 Markdale			559 16
59 Markham	351 86		2,105 56
60 Meaford	90 55		2,402 40
61 Midland			2,871 38
62 Milton			1,733 13
63 Mitchell			1,883 29
64 Morewood			1,011 36
65 Mount Forest			1,873 14
66 Newburgh	68 63		1,121 93
67 Newcastle	41 89		839 97
68 Newmarket	292 69		4,520 81
69 Niagara	24 45		861 23
70 Niagara Falls South	581 27	307 85	3,619 62
71 Norwood	88 70		1,258 24
72 Oakville	73 89	350 05	3,135 13
73 Omemee	50 21		1,530 53
74 Orangeville	196 36		3,157 80
75 Oshawa	1,326 14		4,104 60
76 Paris	162 57		1,617 39
77 Parkhill			1,472 46
78 Parry Sound			2,883 11
79 Pembroke	1,848 97		874 40
80 Penetanguishene			550 00
81 Petrolia			1,394 37
82 Plantagenet			1,701 40
83 Port Dover	62 05		564 55
84 Port Elgin			1,237 98
85 Port Hope	633 89	126 30	2,824 49
86 Port Perry	20 00	392 59	1,416 16
87 Port Rowan	70 60		805 50
88 Prescott	41 10		2,343 77
89 Richmond Hill	48 68		1,452 02
90 Ridgetown	27 22		1,603 49
91 Rockland	47 19		819 26
92 Sault Ste. Marie	948 90		7,119 66
93 Shelburne			1,135 79
94 Simcoe			710 18
95 Smithville	54 99		777 63
96 Stirling	7 80		1,824 58
97 Streetsville			921 21
98 Sudbury	1,408 32		3,800 01
99 Sydenham			1,772 94
100 Thorold			1,519 94
101 Tillsonburg	6 65		2,718 07
102 Toronto, Commerce	346 39	35 00	43,844 50
103 Toronto, Davenport	295 44	13 75	2,106 48
104 Toronto, North	82 04	2 08	17,639 15
105 Trenton	601 92		4,610 98
106 Tweed	98 29		1,840 01
107 Uxbridge	82 52		1,958 61
108 Vienna			376 01
109 Walkerton	148 42		1,567 96
110 Wallaceburg			1,625 81
111 Wardsville	20 50		594 63
112 Waterdown	68 20		949 24
113 Waterford			857 57
114 Watford	219 35	54 98	1,414 96
115 Welland	853 90		4,211 76

AND HIGH SCHOOLS (Continued)

STATEMENT (Continued)

Continued

	Total Expenditure		Charges per year for Tuition
	$	c.	
58	3,643	28	$10.
59	8,577	08	$10.
60	11,723	70	Res. F. I, $5; II, III & IV, $8; non-res. $10.
61	13,978	13	Res. $5; non-res. $10.
62	48,740	40	$10.
63	8,013	23	Res. $6; non-res. $10.
64	4,159	46	Free.
65	7,749	11	Res. F. I, free; all others $10.
66	4,939	42	Res. & Co. free; others $10.
67	3,299	40	Free.
68	17,509	43	$10.
69	3,831	55	Free.
70	15,857	62	Free.
71	5,843	26	$6.
72	10,380	25	Res. $5; non-res. $8.
73	4,070	74	Res. free; non-res. $10.
74	12,390	52	$10.
75	20,609	90	Res. free; non-res. F. I, free; others $7.50.
76	10,641	50	Res., Brant, Oxford, and Waterloo Cos. free; others $20.
77	7,095	96	Res. L. Sch. $6, others $8; non-res. $10.
78	8,141	50	Res. free; non-res. F. I, $10; others $15.
79	15,650	29	Free.
80	5,280	87	Free.
81	8,207	58	Free.
82	5,896	40	$10.
83	3,388	23	Free.
84	5,705	21	$6.50.
85	12,813	97	Res. $9; non-res. free.
86	9,602	17	F. I, Durham Co. free; others $7.50.
87	3,465	14	Free.
88	8,727	47	Res. free; non-res. $5.
89	6,052	80	$10.
90	9,651	98	Res. $6; non-res. $10.
91	4,702	55	Free.
92	36,939	50	$10.
93	5,705	75	Res. F. I, free; all others $10.
94	9,980	55	Res. free; non-res. $10.
95	5,052	15	Free.
96	6,512	65	Free.
97	4,766	71	$10.
98	23,884	39	Free.
99	8,257	76	Lower & Middle School $5; Upper, $12.
100	7,197	72	Free.
101	11,206	32	Lower & Middle School $7.50; Upper, $10.
102	130,421	09	1st and 2nd years. free; other years. $15.
103	11,411	30	F. I, free; II, $9; III, $15; IV, $21; V, $27.
104	77,942	86	F. I, free; II, $9; III, $15; IV, $21; V, $27.
105	15,208	37	Free.
106	6,520	93	Free.
107	9,452	60	Res. $5; non-res. $7.50.
108	2,696	00	Free.
109	8,461	73	Res. F. I, free; all others $10.
110	9,516	13	Res. free; non-res. $10.
111	3,131	19	$7.50.
112	5,144	84	$10.
113	6,434	81	Free.
114	8,425	48	Res. $10; non-res. free.
115	17,608	05	Free.

COLLEGIATE INSTITUTES

I. TABLE L—FINANCIAL

High Schools	Legislative Grants	Municipal Grants (county)	Municipal Grants (local)	Re- School Fees
	$ c.	$ c.	$ c.	$ c.
116 Weston	889 97	3,307 76	7,000 00	1,701 65
117 Whitby	2,522 04	3,690 17	7,639 71	351 75
118 Wiarton	611 88	2,437 57	2,000 00	406 00
119 Williamstown	738 36	665 86	6,340 50	.....
120 Winchester	961 14	3,419 63	4,210 00	.....
121 Wingham	967 61	5,143 25	4,186 84	819 40
1 Totals, High Schools	101,741 08	320,008 31	771,007 66	61,643 11
2 Totals, Collegiate Institutes	74,417 65	189,767 98	1,552,602 31	133,250 12
3 Grand Totals, 1920	176,158 73	509,776 29	2,323,609 97	194,893 23
4 Grand Totals, 1919	170,812 49	413,296 59	1,627,149 70	196,255 91
5 Increases	5,346 24	96,479 70	696,460 27	.....
6 Decreases	.....	.....	.....	1,362 68
7 Percentages	4.33	12.54	57.16	4.79

COLLEGIATE INSTITUTES

I. TABLE L—FINANCIAL

High Schools	Expenditure— Library, scientific apparatus, maps, etc., typewriters, and equipment for physical culture	Art, manual training, household science and agricultural department equipment	School books, stationery, prizes, fuel, examinations and all other expenses
	$ c.	$ c.	$ c.
116 Weston	50 48	.....	3,763 12
117 Whitby	.....	.....	4,485 84
118 Wiarton	73 14	.....	1,620 97
119 Williamstown	.....	97 30	1,752 78
120 Winchester	49 00	100 00	2,214 58
121 Wingham	122 98	54 18	2,097 43
1 Totals, High Schools	19,825 51	2,237 50	306,698 44
2 Totals, Collegiate Institutes	19,518 93	15,942 64	472,597 92
3 Grand Totals, 1920	39,344 44	18,180 14	779,296 36
4 Grand Totals, 1919	30,349 26	17,375 51	562,085 74
5 Increases	8,995 18	804 63	217,210 62
6 Decreases	.....	.....	.....
7 Percentages	1.09	.51	21.71

AND HIGH SCHOOLS (Continued)

STATEMENT (Continued)

	ceipts			Expenditure		
	Debentures	Balances and other sources	Total Receipts	Teachers' Salaries	Buildings, Sites and all permanent improvements	Repairs to school accommodations
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
116	.....	2,553 55	15,452 93	9,692 65	211 76	21 75
117	.....	642 25	14,845 92	9,061 50	.....	536 34
118	.....	1,204 22	6,659 67	4,709 87	57 20	40 42
119	.....	731 42	8,476 14	6,571 50	54 56	.....
120	.....	1,481 54	10,072 31	6,430 00	.....	607 16
121	.....	860 62	11,977 72	8,200 00	25 00	17 15
1	52,373 89	220,246 57	1,527,020 62	886,632 88	106,542 68	39,029 83
2	39,610 02	548,381 20	2,538,029 28	1,382,754 42	257,720 90	79,431 42
3	91,983 91	768,627 77	4,065,049 90	2,269,387 30	364,263 58	118,461 25
4	167,781 20	590,926 41	3,166,222 30	1,801,602 08	261,733 21	74,896 14
5	.....	177,701 36	898,827 60	467,785 22	102,530 37	43,565 11
6	75,797 29	.....	.....	.....	.....	.....
7	2.26	18.91	.....	63.23	10.15	3.30

AND HIGH SCHOOLS (Continued)

STATEMENT (Concluded)

Concluded

	Total Expenditure	Charges per year for Tuition
	$ c.	
116	13,739 76	$10.
117	14,083 68	Res. $6; Co. $7.50; others $10.
118	6,501 60	$6.
119	8,476 14	Free.
120	9,400 74	Free.
121	10,516 74	L. School $6; M. $8; U. $10.
1	1,360,966 84	61 free; 60 not free.
2	2,227,966 23	18 free; 29 not free.
3	3,588,933 07	79 free; 89 not free.
4	2,748,041 94	80 free; 87 not free.
5	840,891 13	2 not free.
6	.....	1 free.
7	.....	.....

Cost per pupil, enrolled attendance $105.16; average attendance $123.96.

COLLEGIATE INSTITUTES AND

II. TABLE M—BOARDS OF EDUCATION, APPROVED

Collegiate Institutes	Brick or Stone School House	Number of Acres in Playground	Schools under Board of Education	Approved Schools—Grade I and Grade II	Value of Library	Value of Scientific Apparatus	Value of Charts, Maps and Globes
					$	$	$
1 Barrie	B	5	.....	II	495	947	78
2 Brantford	B	3½	1	II	874	2,610	611
3 Brockville	S	3	.....	II	1,046	1,350	192
4 Chatham	B	1½	1	II	1,212	3,643	271
5 Clinton	B	3	.....	.....	1,004	1,300	264
6 Cobourg	B	1	.....	II	1,880	1,615	268
7 Collingwood	B	1½	1	.....	900	1,424	204
8 Fort William	B	1¾	1	.....	1,195	1,394	280
9 Galt	S	8½	.....	II	1,334	1,783	452
10 Goderich	B	¾	.....	.....	1,106	832	201
11 Guelph	S	4½	1	.....	1,100	2,600	233
12 Hamilton	B & S	1½	1	.....	2,104	2,958	456
13 Ingersoll	B	2	1	II	1,115	938	167
14 Kingston	B	2½	1	II	1,180	1,419	279
15 Kitchener-Waterloo	B	4 3/5	.....	.....	2,018	1,625	316
16 Lindsay	B	¾	1	II	1,894	1,682	87
17 London	B	3	1	.....	477	1,100	122
18 Morrisburg	B	12	1	.....	822	1,182	167
19 Napanee	B	3¼	1	.....	1,157	925	272
20 Niagara Falls	B	5¾	.....	I	1,223	1,137	261
21 North Bay	B	2	.....	.....	796	1,208	201
22 Orillia	B	2	1	II	869	1,488	163
23 Ottawa	S	1	.....	II	3,352	5,231	449
24 Owen Sound	B	2½	1	.....	1,263	1,474	105
25 Perth	B	3	1	I	1,159	1,216	141
26 Peterborough	B	1½	1	.....	1,458	1,581	71
27 Picton	B	2¾	.....	I	1,112	1,367	340
28 Port Arthur	S	.....	1	I	1,220	2,205	351
29 Renfrew	B	2½	1	.....	857	945	95
30 St. Catherines	B	¾	1	.....	1,100	1,660	216
31 St. Mary's	B	2	.....	II	1,075	1,220	132
32 St. Thomas	B	2¼	1	.....	1,284	2,083	74
33 Sarnia	B	1½	1	II	1,228	1,829	182
34 Seaforth	B	2½	.....	.....	876	810	105
35 Smith's Falls	B	4½	1	II	671	1,398	88
36 Stratford	B	10	.....	II	1,114	1,845	170
37 Strathroy	B	10	.....	II	1,167	1,164	278
38 Toronto, Harbord St.	B	2½	1	II	2,985	5,931	239
39 Toronto, Humberside	B	6	1	.....	2,666	4,053	157
40 Toronto, Jarvis	B	2	1	.....	2,418	4,486	265
41 Toronto, Malvern Ave.	B	3	1	.....	1,489	2,610	133
42 Toronto, Oakwood	B & S	5	1	.....	2,560	4,830	249
43 Toronto, Parkdale	B	2½	1	.....	2,292	3,516	202
44 Toronto, Riverdale	B	4	1	.....	1,853	2,526	127
45 Vankleek Hill	B	2¾	.....	.....	850	1,149	108
46 Windsor	B	3	1	II	1,804	2,491	275
47 Woodstock	B	1	1	II	1,708	2,289	238
Totals	.....	.....	31	4, I; 19, II	65,362	95,069	10,335

HIGH SCHOOLS (Continued.)

SCHOOLS, EQUIPMENT, DESTINATION OF PUPILS, ETC.

General Equipment

	Art Models	Typewriters	Biological Specimens	Equipment for Physical Culture	Gymnasium (not including equipment)	Museum	Aquarium, Herbarium, etc.	Pictures	Total Value of General Equipment
	$	$	$	$	$	$	$	$	$
1	113	790	122	605	9,000	.....	.....	127	12,277
2	199	1,618	686	530	.....	.....	.....	415	7,543
3	130	659	103	413	2,500	50	25	319	6,787
4	101	2,100	213	374	2,500	.....	36	177	10,627
5	103	225	84	148	875	.....	.....	160	4,163
6	132	1,250	162	554	3,500	1,000	.....	355	10,716
7	114	534	118	257	1,200	31	.....	100	4,882
8	140	895	274	307	16,000	.....	120	40	20,645
9	267	1,100	364	216	.....	692	25	1,800	8,033
10	102	400	107	356	2,500	.....	.....	190	5,794
11	52	960	319	1,036	2,800	100	75	625	9,900
12	100	310	219	1,330	8,000	.....	.....	300	15,777
13	101	340	100	366	800	.....	15	176	4,118
14	100	720	114	415	7,000	.....	.....	350	11,577
15	195	2,133	201	616	1,000	196	.....	412	8,712
16	109	800	268	506	4,000	100	.....	300	9,746
17	.....	2,491	287	85	.....	.....	.....	50	4,612
18	111	315	100	359	980	.....	.....	233	4,269
19	101	765	115	429	962	.....	.....	214	4,940
20	103	955	110	355	10,000	.....	.....	200	14,344
21	101	1,000	102	417	10,000	.....	.....	184	14,009
22	94	670	116	288	1,800	.....	.....	150	5,638
23	245	2,756	465	1,630	10,000	.....	465	921	25,514
24	191	1,045	101	352	3,000	100	.....	75	7,706
25	106	200	157	348	7,000	.....	9	56	10,392
26	152	2,225	242	55	.....	242	50	857	6,933
27	102	1,040	143	302	5,000	.....	40	779	10,225
28	104	800	198	444	20,000	139	6	233	25,700
29	101	475	133	379	5,000	.....	.....	.....	7,985
30	114	1,135	190	409	8,000	.....	6	391	13,221
31	106	260	194	553	7,000	.....	.....	100	10,640
32	155	1,345	155	470	1,532	200	.....	1,200	8,498
33	113	1,500	132	311	1,380	.....	.....	250	6,925
34	100	.....	115	157	600	.....	.....	40	2,803
35	107	610	103	64	7,688	.....	.....	84	10,813
36	91	1,050	500	406	2,000	.....	.....	350	7,526
37	100	200	94	371	3,500	.....	.....	200	7,074
38	140	.....	1,320	1,172	10,000	.....	170	600	22,557
39	157	90	382	578	10,000	.....	.....	715	18,798
40	155	115	600	435	7,000	678	75	1,632	17,859
41	174	.....	239	581	5,000	200	.....	150	10,576
42	163	130	1,292	792	10,000	.....	.....	852	20,868
43	148	.....	387	319	10,000	.....	.....	477	17,341
44	120	90	672	600	10,000	300	50	661	16,999
45	97	260	127	304	3,200	.....	.....	100	6,195
46	142	2,313	153	595	40,000	100	.....	200	48,073
47	142	566	118	532	5,000	.....	.....	252	10,845
	5,893	39,235	12,496	22,121	277,317	4,128	1,167	18,052	551,175

COLLEGIATE INSTITUTES AND

II. TABLE M—BOARD OF EDUCATION, APPROVED

Collegiate Institutes	Value of Manual Training Department Equipment				Value of Household Science Department Equipment			Value of Agricultural Department Equipment	Value of Art Equipment (Middle School)
	Woodwork	Woodturning	Forging	Machine Shop Practice	Cookery, Sanitation and Hygiene	Handwork and Machine Sewing	Laundry Work		
	$	$	$	$	$	$	$	$	$
1 Barrie	.....	.....	.....	.....	.....	.....	.....	.....	.....
2 Brantford	886	1750	500	850	623	273	.....	.....	199
3 Brockville	.....	.....	.....	.....	.....	.....	.....	251	120
4 Chatham	824	.....	.....	.....	1539	.....	.....	.....	.....
5 Clinton	.....	.....	.....	.....	.....	.....	.....	299	114
6 Cobourg	.....	.....	.....	.....	1,462	52	.....	261	...
7 Collingwood	1,219	.....	.....	.....	917	.....	.....	.....	.....
8 Fort William	5,174	1,229	.....	.....	1,076	58	.....	.....	.....
9 Galt	1,811	299	.....	.....	1,637	33	22	.....	125
10 Goderich	.....	.....	.....	.....	.....	.....	.....	.....	.....
11 Guelph	.....	.....	.....	.....	.....	.....	.....	.....	.....
12 Hamilton	1,035	.....	.....	.....	.....	.....	.....	.....	.....
13 Ingersoll	461	179	83	445	498	65	.....	193	.....
14 Kingston	.....	.....	.....	.....	.....	.....	.....	.....	.....
15 Kitchener-Waterloo	771	257	700	829	1,647	.....	.....	.....	125
16 Lindsay	.....	.....	.....	.....	.....	.....	.....	.....	.....
17 London	516	.....	.....	.....	.....	.....	.....	107	.....
18 Morrisburg	.....	.....	.....	.....	.....	.....	.....	.....	.....
19 Napanee	.....	.....	.....	.....	.....	.....	.....	.....	.....
20 Niagara Falls	.....	.....	.....	.....	746	296	.....	.....	.....
21 North Bay	.....	.....	.....	.....	.....	.....	.....	.....	.....
22 Orillia	.....	.....	.....	.....	.....	.....	.....	.....	.....
23 Ottawa	.....	.....	.....	.....	.....	.....	.....	.....	73
24 Owen Sound	505	350	.....	.....	731	52	.....	.....	30
25 Perth	.....	.....	.....	.....	.....	.....	.....	.....	.....
26 Peterborough	.....	.....	.....	.....	.....	.....	.....	.....	.....
27 Picton	.....	.....	.....	.....	.....	.....	.....	254	.....
28 Port Arthur	1,085	275	75	.....	2,858	93	55	.....	.....
29 Renfrew	.....	.....	.....	.....	.....	.....	.....	.....	.....
30 St. Catharines	.....	.....	.....	.....	.....	.....	.....	.....	31
31 St. Mary's	.....	.....	.....	.....	.....	.....	.....	.....	.....
32 St. Thomas	843	30	.....	.....	926	.....	.....	191	.....
33 Sarnia	.....	.....	.....	.....	.....	.....	.....	.....	.....
34 Seaforth	.....	.....	.....	.....	.....	.....	.....	.....	.....
35 Smith's Falls	1,360	364	.....	.....	726	.....	.....	333	.....
36 Stratford	563	400	143	390	1,000	88	.....	.....	150
37 Strathroy	.....	.....	.....	.....	.....	.....	.....	.....	.....
38 Toronto, Harbord St.	.....	.....	.....	.....	.....	.....	.....	.....	.....
39 Toronto, Humberside	.....	.....	.....	.....	.....	.....	.....	.....	.....
40 Toronto, Jarvis	.....	.....	.....	.....	.....	.....	.....	.....	12
41 Toronto, Malvern Ave.	.....	.....	.....	.....	.....	.....	.....	.....	.....
42 Toronto, Oakwood	2,278	351	.....	.....	401	6	70	.....	.....
43 Toronto, Parkdale	.....	.....	.....	.....	.....	.....	.....	.....	.....
44 Toronto, Riverdale	.....	1,589	.....	.....	251	.....	1,600	.....	23
45 Vankleek Hill	.....	.....	.....	.....	.....	.....	.....	.....	.....
46 Windsor	686	.....	.....	.....	1,379	.....	.....	.....	.....
47 Woodstock	778	421	843	2,104	952	67	.....	.....	.....
Totals	20,795	7,494	2,344	4,618	19,369	1,083	1,747	1,889	1002

HIGH SCHOOLS (Continued)

SCHOOLS, EQUIPMENT, DESTINATION OF PUPILS, ETC. (Continued)

	Total value of Special Equipment as per preceding nine columns	Value of School Sites, Buildings and Furniture	Religious and other Exercises				Destination of Pupils							
			School in which Bible or Selections therefrom are used	Schools opened with Prayer	Schools closed with Prayer	Commencement Exercises	Commerce	Agriculture	Law, Medicine, Dentistry or the Church	Teaching	The Trades	Other occupations	Other High Schools or Collegiates	Without occupation
	$	$												
1	.....	150,000	1	1	....	1	16	14	4	20	6	20	5	23
2	5,081	250,000	1	1	....	1	47	24	22	15	19	34	16	27
3	371	50,137	.....	1	....	1	30	13	17	16	14	16	10	15
4	2,363	60,000	1	1	....	....	56	26	2	14	5	24	30	9
5	413	20,000	1	1	....	1	18	19	2	8	5	10	9	.....
6	1,775	30,000	1	1	....	....	3	4	.....	7	2	17	10	7
7	2,136	27,014	1	1	....	1	20	3	1	16	5	5	12	7
8	7,537	284,816	1	1	....	1	53	7	3	6	12	42	9	.....
9	3,927	90,000	1	1	....	1	56	15	2	6	12	20	13	16
10	.....	45,000	1	1	....	1	18	6	.....	9	5	7	22	15
11	.....	50,000	.....	1	....	1	40	7	4	8	17	9	14	22
12	1,035	170,000	1	1	....	1	70	2	31	3	13	35	108	51
13	1,924	30,000	1	1	....	1	18	20	.....	4	2	8	9	4
14	.....	121,770	1	1	....	....	68	20	15	13	13	31	21	7
15	4,329	50,000	1	1	....	1	71	....	18	6	1	1	.....	19
16	.....	150,000	.....	1	....	1	47	33	5	35	8	7	10	9
17	623	(Burned)	.....	1	....	1	205	15	48	45	24	64	67	65
18	.....	15,350	1	1	....	1	7	9	1	3	7	7	1	7
19	.....	60,000	1	1	....	1	24	10	4	18	4	7	9	9
20	1,042	100,000	1	1	....	1	22	13	7	....	15	20	11	9
21	.....	105,000	.....	1	....	1	35	....	4	9	4	8	8	40
22	.....	82,500	1	1	....	....	39	13	7	12	7	8	16	6
23	73	633,416	1	1	....	1	114	21	31	12	25	169	39	78
24	1,668	100,000	.....	1	....	1	71	24	8	17	13	29	8	11
25	.....	26,811	1	1	....	1	21	7	1	11	3	6	6	17
26	.....	83,992	.....	1	....	1	50	12	8	9	22	22	9	21
27	254	65,000	.....	1	....	1	21	23	6	6	2	16	3	2
28	4,441	200,000	1	1	....	1	44	....	.....	7	11	7	3	13
29	.....	35,000	.....	1	....	1	18	19	8	38	6	9	6	11
30	31	44,000	1	1	....	1	79	13	13	4	5	28	24	22
31	.....	34,000	1	1	....	1	23	21	3	12	7	6	2	8
32	1,990	100,000	.....	1	....	1	70	36	16	12	26	12	8	.....
33	.....	100,000	1	1	....	1	22	5	1	7	11	11	5	21
34	.....	12,000	.....	1	....	1	2	1	5	15	3	5	.....	.....
35	2,783	125,000	.....	1	..	....	31	9	1	4	10	20	8	2
36	2,734	100,000	.....	1	....	1	40	24	11	22	20	15	5	10
37	.....	60,000	1	1	....	1	13	8	2	15	3	6	9	.....
38	.....	150,000	1	1	....	1	60	....	30	30	.....	24	150	50
39	.....	176,000	1	1	....	1	36	2	10	11	.....	66	37	32
40	12	135,500	1	1	....	1	36	3	48	13	16	42	36	32
41	.....	120,000	1	1	....	1	50	5	8	2	16	24	11	15
42	3,106	273,619	1	1	....	1	63	2	6	12	17	49	74	49
43	.....	100,000	1	1	....	1	54	8	36	18	17	38	44	13
44	3,463	257,600	1	1	....	1	102	3	2	5	1	3	80	30
45	.....	30,000	.....	1	....	....	5	7	.....	11	1	14	8	11
46	2,065	255,500	.....	1	....	1	76	3	20	3	14	72	28	26
47	5,165	100,000	.....	1	....	1	40	22	9	15	4	13	9	8
	60,341	5,259,025	31	47	....	41	2,104	551	480	584	453	1,106	1,022	849

COLLEGIATE INSTITUTES AND

II. TABLE M—BOARDS OF EDUCATION, APPROVED SCHOOLS,

High Schools	Brick or Stone School House	Number of Acres in Playground	Schools under Board of Education	Approved Schools Grade I and Grade II	Value of General Library	Scientific Apparatus	Charts, Maps and Globes	Art Models
					$	$	$	$
1 Alexandria	B	3	.....	II	757	691	87	83
2 Alliston	B	4	.....	.....	387	826	55	49
3 Almonte	S	15	1	.....	612	442	58	63
4 Amherstburg	B	1½	.....	.....	315	436	82	52
5 Arnprior	B	1	1	II	743	693	97	75
6 Arthur	B	3½	.....	II	500	811	58	79
7 Athens	S	2 2/5	.....	II	720	849	111	84
8 Aurora	B	1	.....	II	554	942	109	84
9 Avonmore	B	2	.....	II	567	445	124	58
10 Aylmer	B	3½	.....	II	1,143	1,057	268	109
11 Beamsville	B	3½	1	I	333	666	79	65
12 Belleville	B&S	3	1	.....	1,084	1,808	299	95
13 Bowmanville	B	3	.....	II	793	968	144	103
14 Bracebridge	B	2	.....	.....	488	646	89	47
15 Bradford	B	6	.....	II	381	462	76	83
16 Brampton	B	5	.....	I	323	988	186	61
17 Brighton	B	8	1	II	361	447	267	76
18 Burlington	B	4 6/11	.....	.....	335	463	125	61
19 Caledonia	B	1½	1	.....	750	895	100	68
20 Campbellford	B	½	1	.....	851	1,010	155	108
21 Carleton Place	S	1½	1	.....	794	743	99	88
22 Cayuga	B	1	1	II	477	345	51	96
23 Chatsworth	B	1	.....	.....	311	325	71	51
24 Chesley	B	3	1	.....	450	502	105	50
25 Chesterville	B	3	.....	.....	402	547	127	50
26 Colborne	B	1	1	.....	573	625	60	55
27 Cornwall	B	2	.....	II	863	822	116	80
28 Deseronto	B	3	.....	II	615	716	103	51
29 Dundalk	B	2	.....	.....	296	244	70	57
30 Dundas	B	½	1	.....	839	987	85	76
31 Dunnville	B	5½	1	II	569	927	169	91
32 Durham	B	3	.....	II	445	552	80	58
33 Dutton	B	1	.....	.....	410	678	66	85
34 Elora	S	½	1	.....	317	532	53	53
35 Essex	...	2	.....	.....	430	863	66	75
36 Exeter	B	3	1	.....	503	443	69	75
37 Fergus	S	2/5	1	.....	677	571	87	75
38 Flesherton	B	2	.....	II	383	369	56	53
39 Forest	B	2	.....	.....	516	621	50	52
40 Fort Frances	F	¾	.....	II	428	404	180	83
41 Gananoque	B	½	1	II	844	814	76	104
42 Georgetown	B	4½	.....	II	569	689	106	91
43 Glencoe	B	2	.....	.....	486	725	65	51
44 Gravenhurst	B	5	1	II	393	464	79	53
45 Grimsby	B	4	1	.....	348	421	98	65
46 Hagersville	B	3½	.....	.....	604	657	113	79
47 Haileybury	B	5½	.....	I	697	1,008	79	92
48 Harriston	B	3	1	II	441	634	62	79
49 Hawkesbury	B	1⅓	1	.....	589	628	62	70
50 Iroquois	B	1	.....	.....	997	1,118	187	77
51 Kemptville	B	2	1	.....	552	868	130	70
52 Kenora	B	3	1	II	650	898	286	74
53 Kincardine	B	8	1	.....	735	1,010	80	99
54 Leamington	B	2	.....	.....	635	839	120	110
55 Listowel	B	3	1	I	430	454	60	59
56 Lucan	B	3½	.....	II	475	583	88	76
57 Madoc	B	1⅔	.....	.....	446	1,112	68	97

HIGH SCHOOLS (Continued)

EQUIPMENT, DESTINATION OF PUPILS, ETC. (Continued)

	Equipment								Value of Manual Training Dep't Equipment			
	Typewriters	Biological Specimens	Equipment for Physical Culture	Gymnasium (not including equipment)	Museum	Aquarium, Herbarium, etc.	Pictures	Total Value of General Equipment	Woodwork	Woodturning	Forging	Machine Shop Practice.
	$	$	$	$	$	$	$	$	$	$	$	$
1	.....	130	26	.....	.....	.....	140	1,914	.....	.....	.....	.....
2	.....	49	.....	.....	.....	.....	45	1,411	.....	.....	.....	.....
3	.....	102	22	.....	.....	.....	.....	1,299	.....	.....	.....	.....
4	150	49	31	.....	.....	.....	12	1,127	362	.....	.....	.....
5	.....	104	56	.....	.....	.....	182	1,950	.....	.....	.....	.....
6	.....	83	13	.....	.....	.....	39	1,583	.....	.....	.....	.....
7	.....	123	34	.....	.....	.....	112	2,033	.....	.....	.....	.....
8	.....	102	87	.....	.....	.....	300	2,178	.....	.....	.....	.....
9	.....	63	18	72	.....	.....	.....	1,347	.....	.....	.....	.....
10	140	220	141	680	.....	90	90	3,938	.....	.....	.....	.....
11	.....	105	20	3,000	.....	.....	55	4,323	.....	.....	.....	.....
12	1,149	195	222	.....	.....	.....	252	5,104	.....	.....	.....	.....
13	.....	139	90	.....	.....	.....	319	2,556	.....	.....	.....	.....
14	.....	40	47	.....	.....	.....	.....	1,357	.....	.....	.....	.....
15	20	52	95	.....	.....	.....	.....	1,169	.....	.....	.....	.....
16	.....	118	95	10,000	100	.....	201	12,072	.....	.....	.....	.....
17	.....	75	15	.....	.....	.....	10	1,251	.....	.....	.....	.....
18	.....	30	54	.....	.....	.....	.....	1,068	.....	.....	.....	.....
19	.....	107	40	.....	.....	.....	.....	1,960	.....	.....	.....	.....
20	175	139	24	.....	.....	.....	449	2,911	.....	.....	.....	.....
21	.....	101	25	.....	.....	.....	30	1,880	.....	.....	.....	.....
22	.....	118	40	.....	.....	.....	110	1,237	.....	.....	.....	.....
23	.....	47	16	.....	.....	.....	15	836	.....	.....	.....	.....
24	.....	86	36	.....	25	.....	170	1,424	.....	.....	.....	.....
25	.....	96	43	.....	.....	.....	74	1,339	.....	.....	.....	.....
26	60	54	45	.....	.....	.....	60	1,532	.....	.....	.....	.....
27	1,070	104	60	.....	.....	25	246	3,386	.....	.....	.....	.....
28	.....	58	211	.....	.....	.....	50	1,804	.....	.....	.....	.....
29	.....	50	10	.....	.....	.....	25	752	.....	.....	.....	.....
30	1,125	61	48	.....	.....	.....	.....	3,221	.....	.....	.....	.....
31	160	122	80	.....	750	.....	350	3,218	.....	.....	.....	.....
32	.....	109	74	.....	.....	.....	157	1,475	.....	.....	.....	.....
33	.....	103	15	.....	.....	.....	59	1,416	.....	.....	.....	.....
34	.....	5	10	.....	.....	.....	.....	970	.....	.....	.....	.....
35	.....	101	53	.....	.....	.....	25	1,613	.....	.....	.....	.....
36	.....	57	16	.....	.....	.....	75	1,238	.....	.....	.....	.....
37	.....	101	49	.....	.....	.....	.....	1,560	.....	.....	.....	.....
38	.....	52	35	.....	.....	.....	25	973	.....	.....	.....	.....
39	50	58	38	.....	.....	.....	55	1,440	.....	.....	.....	.....
40	741	56	125	.....	.....	.....	93	2,110	.....	.....	.....	.....
41	366	81	202	1,600	.....	.....	437	4,524	.....	.....	.....	.....
42	235	150	39	.....	400	.....	101	2,380	.....	.....	.....	.....
43	30	68	26	.....	.....	.....	50	1,501	.....	.....	.....	.....
44	120	50	9	.....	.....	.....	30	1,198	.....	.....	.....	.....
45	.....	48	155	.....	.....	5	68	1,208	.....	.....	.....	.....
46	.....	95	182	.....	.....	7	34	1,771	.....	.....	.....	.....
47	151	76	38	.....	.....	.....	345	2,486	.....	.....	.....	.....
48	.....	99	11	.....	.....	.....	102	1,428	.....	.....	.....	.....
49	.....	53	42	.....	.....	.....	100	1,544	.....	.....	.....	.....
50	100	108	40	.....	.....	.....	100	2,727	.....	.....	.....	.....
51	151	112	36	.....	.....	8	118	2,045	.....	.....	.....	.....
52	1,328	63	453	2,500	.....	.....	180	6,432	.....	.....	.....	.....
53	.....	95	80	800	.....	.....	.....	2,899	.....	.....	.....	.....
54	.....	109	137	.....	.....	.....	85	2,035	.....	.....	.....	.....
55	500	124	72	.....	.....	.....	160	1,859	.....	.....	.....	.....
56	.....	102	140	.....	.....	5	25	1,494	.....	.....	.....	.....
57	.....	105	56	.....	.....	.....	80	1,964	.....	.....	.....	.....

COLLEGIATE INSTITUTES

II. TABLE M—BOARDS OF EDUCATION, APPROVED SCHOOLS.

High Schools	Value of Household Science Department Equipment			Value of Agricultural Department Equipment	Value of Art Equipment (Middle School)	Total value of Special Equipment as per preceding nine columns	Value of School Sites, Buildings and Furniture
	Cookery, Sanitation and Hygiene	Handwork and Machine Sewing	Laundry Work				
	$	$	$	$	$	$	$
1 Alexandria							25,000
2 Alliston					149	149	20,000
3 Almonte							2,600
4 Amherstburg						362	658
5 Arnprior							20,000
6 Arthur				237		237	20 000
7 Athens				135		135	14,750
8 Aurora							15,000
9 Avonmore							12,908
10 Aylmer							18,000
11 Beamsville	550			751		1,301	70,000
12 Belleville	845	128	25	151		1,149	120,000
13 Bowmanville				576		576	40,000
14 Bracebridge							5,710
15 Bradford							20,000
16 Brampton							80,000
17 Brighton							35,000
18 Burlington							15,000
19 Caledonia							9,000
20 Campbellford							15,000
21 Carleton Place							25,500
22 Cayuga							6,000
23 Chatsworth							1,000
24 Chesley					16	16	25,000
25 Chesterville							12,000
26 Colborne							8,500
27 Cornwall	607	164				771	47,500
28 Deseronto							18,000
29 Dundalk							6,500
30 Dundas							26,540
31 Dunnville							42,000
32 Durham							18,500
33 Dutton							12,000
34 Elora							4,500
35 Essex							15,000
36 Exeter							12,500
37 Fergus							8,000
38 Flesherton							25,000
39 Forest							30,000
40 Fort Frances							
41 Gananoque							42,000
42 Georgetown							40,000
43 Glencoe							15,000
44 Gravenhurst							18,000
45 Grimsby							40,000
46 Hagersville							14,000
47 Haileybury							65,000
48 Harriston							15,000
49 Hawkesbury							25,000
50 Iroquois							10,000
51 Kemptville					33	33	30,000
52 Kenora							45,727
53 Kincardine				262		262	20,000
54 Leamington				126		126	20,000
55 Listowel							37,000
56 Lucan							21,000
57 Madoc							10,000

AND HIGH SCHOOLS (Continued)

EQUIPMENT, DESTINATION OF PUPILS, ETC (Continued)

	Religious and other Exercises				Destination of Pupils							
	School in which Bible or Selections therefrom are used	Schools opened with Prayer	Schools closed with Prayer	Commencement Exercises	Commerce	Agriculture	Law, Medicine, Dentistry or the Church	Teaching	The Trades	Other occupations	Other High Schools or Collegiates	Without occupation
1		1		1	3	12	1	7		3	5	4
2	1	1			3	8		4		3	3	4
3	1	1		1	6	10	5	8	4	7		6
4		1		1	2	1	4	1	3	2	2	6
5		1		1	7	8	2	6		14	6	14
6		1		1	3	7		6		2	1	
7	1	1		1	6	21	3	10	6		10	7
8	1	1			4	11	3	4	1	13	7	4
9		1		1	1	4		3	2	6	2	
10	1	1			8	13		7		7	6	8
11	1	1		1	2	2		1	2	1	2	
12	1	1		1	50	6	7	6	14	11	35	14
13	1	1		1	16	4		5	6	8	5	
14		1		1	13	2	3	3	7			1
15	1	1			4	2			3	2	1	11
16		1		1	10	32	3	1	10	4	5	
17		1								6	6	7
18		1			3	4	3	2		2	7	3
19	1	1				5	1	5		2	1	
20		1		1	7	5	2	11	6	3	10	6
21		1		1	9	11	6	12	7	6	8	5
22		1		1	7	4		2			4	1
23	1	1			1	3		4		4	2	1
24	1	1		1	6	3	2	6	1		5	4
25		1			8	4		4		1	1	1
26	1	1			6	7	1	3			4	4
27	1	1		1	26	12	2	14	3	17	2	3
28		1			3			2		9	8	7
29		1		1		9		5	1	4	2	
30		1		1	12	5	8	3	7	2		8
31		1			8	10	3	2	4			2
32	1	1			3	7		4	4	16	2	3
33		1				11	5	3	6	10	3	4
34	1	1		1	1	2		1	3	4	1	2
35	1	1		1	23	22	3	6		5	7	6
36	1	1		1	6	1	1	3	2	5	7	1
37		1		1	15	7	1	4			3	16
38	1	1		1	3	6		3	1	3	4	1
39		1			7	3	2	4				7
40		1		1	3	1	3	4		4	3	4
41	1	1			8	2	1	5	4	17	3	
42		1		1	13	4	4	4	4	3	2	14
43	1	1	1	1	5	6		3		1	1	3
44	1	1			4			2		1	2	
45	1	1	1		10	10		4	3	9	10	2
46	1	1			6	5	1	5	3	6	3	3
47		1		1	12		1	4	4	17	8	9
48		1			3	6	7	4	4	5	4	
49	1	1				5	2		7	2	5	2
50		1		1	3	5	1	4		3		2
51	1	1		1	6	5	2	10	4	7	6	9
52	1	1			22	1	1	2	2	2	4	7
53	1	1		1	8	17	1	20	4	7	3	
54		1		1	4	14	6	2	12	2	9	
55		1			19	10	4	13	3	5	3	2
56		1			6	13	1	3		2	2	
57	1	1			5	6	1	11	2	4	13	4

COLLEGIATE INSTITUTES

II. TABLE M—BOARDS OF EDUCATION, APPROVED

High Schools	Brick or Stone School House	Number of Acres in Playground	Schools under Board of Education	Approved Schools—Grade I and Grade II	Value of Library	Value of Scientific Apparatus	Value of Charts, Maps and Globes	Value of Art Models
					$	$	$	$
58 Markdale	B	2	.....	.....	324	311	96	53
59 Markham	B	1½	.....	.....	477	787	299	77
60 Meaford	B	4½	.....	I	762	1,332	110	77
61 Midland	B	6½	1	II	674	962	135	85
62 Milton	B	5	.....	.....	336	441	49	45
63 Mitchell	B	¾	.....	II	463	495	170	89
64 Morewood	B	3	.....	.....	363	413	72	50
65 Mount Forest	B	2½	1	.....	544	674	194	131
66 Newburgh	S	1½	1	.....	614	440	59	73
67 Newcastle	B	3	1	.....	411	380	49	49
68 Newmarket	B	2	.....	II	585	699	186	91
69 Niagara	B	¼	.....	.....	301	305	72	50
70 Niagara Falls South	B	5	.....	I	700	1,481	106	76
71 Norwood	B	8	1	II	445	569	97	56
72 Oakville	B	3½	1	.....	647	851	261	77
73 Omemee	B	2	1	.....	342	356	58	67
74 Orangeville	B	4	.....	II	908	1,117	247	75
75 Oshawa	B	4	1	II	929	1,580	385	83
76 Paris	B	4	1	II	681	818	105	75
77 Parkhill	B	3	1	.....	643	876	51	83
78 Parry Sound	B	1	.....	II	485	651	91	65
79 Pembroke	B	¾	1	.....	858	1,062	112	78
80 Penetanguishene	B	10	.....	I	440	832	76	63
81 Petrolia	B	1½	.....	.....	571	762	66	84
82 Plantagenet	B	1	.....	II	487	487	130	80
83 Port Dover	B	2½	1	.....	557	501	113	52
84 Port Elgin	B	1⅜	.....	.....	331	599	85	69
85 Port Hope	B	1½	.....	II	793	1,000	152	76
86 Port Perry	B	1½	1	.....	488	781	60	70
87 Port Rowan	B	3	1	.....	396	529	54	89
88 Prescott	B	1⅛	1	II	489	920	110	80
89 Richmond Hill	B	1½	1	.....	463	535	203	77
90 Ridgetown	B	2½	.....	.....	861	1,390	119	107
91 Rockland	B	3½	.....	II	393	401	77	53
92 Sault Ste. Marie	B	6	.....	.....	755	937	72	78
93 Shelburne	B	2	1	.....	376	675	110	71
94 Simcoe	B	8	1	II	656	978	126	97
95 Smithvill	B	2	.....	.....	308	549	45	53
96 Stirling	B	2	1	II	454	501	67	77
97 Streetsville	B	1/6	.....	.....	382	472	89	49
98 Sudbury	B	5	.....	.....	647	1,649	69	89
99 Sydenham	S	2½	.....	II	530	723	95	76
100 Thorold	B	2½	.....	.....	304	697	125	48
101 Tillsonburg	B&S	2½	.....	II	469	946	203	79
102 Toronto, Commerce	B	4	1	.....	2,946	4,203	348	121
103 Toronto, Davenport	B	.....	1	.....	422	781	42	42
104 Toronto, North	B	4	1	II	744	982	68	100
105 Trenton	B	3	.....	.....	762	611	260	79
106 Tweed	B	3½	.....	II	325	819	53	51
107 Uxbridge	B	¾	1	.....	575	677	127	83
108 Vienna	B	5	1	.....	727	269	74	51
109 Walkerton	B	1¼	.....	.....	481	652	84	100
110 Wallaceburg	B	1½	1	.....	548	468	63	100
111 Wardsville	B	2½	1	.....	338	393	61	51
112 Waterdown	S	3	.....	.....	212	417	49	50
113 Waterford	B	3	.....	II	534	659	79	70
114 Watford	B	3½	1	II	594	994	165	109

AND HIGH SCHOOLS (Continued)

SCHOOLS, EQUIPMENT, DESTINATION OF PUPILS, ETC. (Continued)

General Equipment								Value of Manual Training Department Equipment			
Typewriters	Biological Specimens	Equipment for Physical Culture	Gymnasium (not including equipment)	Museum	Aquarium, Herbarium, etc.	Pictures	Total value of General Equipment	Woodwork	Woodturning	Forging	Machine Shop Practice
$	$	$	$	$	$	$	$	$	$	$	$
58	50	110	.....	.....	.....	38	982	.....	.....	.....	.....
59	112	16	.....	.....	.....	85	1,853	.....	.....	.....	.....
60 590	119	391	1,400	22	.....	435	5,238	.....	.....	.....	.....
61	122	368	.....	50	4	300	2,700	.....	.....	.....	.....
62	50	.....	.....	.....	.....	.....	921	.....	.....	.....	.....
63	101	203	550	.....	.....	92	2,163	.....	.....	.....	.....
64	53	18	.....	1	.....	37	1,007	.....	.....	.....	.....
65	102	15	.....	.....	.....	150	1,810	.....	.....	.....	.....
66	54	16	.....	.....	.....	60	1,316	.....	.....	.....	.....
67	42	.....	.....	.....	.....	.....	931	.....	.....	.....	.....
68 815	122	184	.....	.....	.....	.....	2,682	.....	.....	.....	.....
69 90	70	237	1,475	.....	.....	.....	2,600	.....	.....	.....	.....
70 915	117	466	7,500	.....	.....	100	11,461	.....	.....	.....	.....
71	63	32	.....	.....	.....	51	1,313	.....	.....	.....	.....
72 390	97	59	.....	.....	.....	75	2,457	.....	.....	.....	.....
73	50	30	.....	.....	.....	20	923	.....	.....	.....	.....
74 565	99	313	2,500	.....	.....	17	5,841	.....	.....	.....	.....
75 1,392	194	207	.....	.....	.....	207	4,977	.....	.....	.....	.....
76 252	111	30	.....	.....	.....	137	2,209	.....	.....	.....	.....
77	54	17	.....	.....	.....	200	1,924	.....	.....	.....	.....
78	55	101	.....	.....	.....	94	1,542	.....	.....	.....	.....
79 510	116	40	.....	.....	.....	188	2,964	.....	.....	.....	.....
80 180	157	31	.....	60	20	112	1,971	.....	.....	.....	.....
81	77	43	.....	.....	.....	56	1,659	.....	.....	.....	.....
82	92	20	.....	.....	.....	15	1,311	.....	.....	.....	....
83	59	25	.....	.....	.....	32	1,339	.....	.....	.....	....
84 100	42	20	.....	.....	.....	70	1,316	.....	.....	.....	.....
85 515	89	41	.....	.....	.....	400	3,066	.....	.....	.....	.....
86	78	124	.....	.....	.....	44	1,645	.....	.....	.....	.....
87	51	40	.....	.....	.....	15	1,174	.....	.....	.....	.....
88	101	58	.....	.....	.....	74	1,832	.....	.....	.....	.....
89	84	19	.....	.....	.....	60	1,441	.....	.....	.....	.....
90 100	101	261	900	.....	25	100	3,964	.....	.....	.....	.....
91	66	10	.....	.....	.....	.....	1,000	.....	.....	.....	.....
92 885	101	12	.....	.....	.....	293	3,133	539	270	238	2,991
93	62	36	.....	.....	.....	45	1,375	.....	.....	.....	.....
94 150	141	47	.....	.....	.....	.....	2,195	.....	.....	.....	.....
95	65	17	.....	.....	.....	20	1,057	.....	.....	.....	.....
96	102	17	.....	.....	9	.....	1,227	.....	.....	.....	.....
97 150	51	13	.....	.....	.....	.....	1,206	.....	.....	.....	.....
98 890	119	431	2,500	.....	.....	40	6,434	.....	.....	.....	.....
99	158	106	.....	43	.....	42	1,773	.....	.....	.....	.....
100 180	50	5	.....	.....	.....	.....	1,409	.....	.....	.....	.....
101 100	104	63	.....	.....	.....	364	2,328	.....	.....	.....	.....
102	.....	527	.....	472	.....	300	8,917	.....	.....	.....	.....
103 121	.....	82	.....	.....	.....	.....	1,490	.....	.....	.....	.....
104	180	61	.....	.....	.....	116	2,251	.....	.....	.....	.....
105	67	46	2,500	.....	.....	192	4,517	.....	.....	.....	.....
106	68	70	.....	.....	5	40	1,431	.....	.....	.....	.....
107	123	30	.....	.....	.....	.....	1,615	.....	.....	.....	.....
108	59	8	.....	.....	.....	12	1,200	.....	.....	.....	.....
109 190	103	24	.....	.....	.....	120	1,754	.....	.....	.....	.....
110 200	108	36	.....	.....	.....	25	1,548	.....	.....	.....	.....
111	51	10	.....	.....	.....	17	921	.....	.....	.....	.....
112	42	21	.....	.....	.....	.....	791	.....	.....	.....	.....
113	53	61	.....	.....	.....	.....	1,456	.....	.....	.....	.....
114 45	97	125	.....	.....	10	112	2,251	.....	.....	.....	.....

COLLEGIATE INSTITUTES

II. TABLE M—BOARDS OF EDUCATION, APPROVED SCHOOLS

High Schools	Value of Household Science Department Equipment: Cookery, Sanitation and Hygiene	Value of Household Science Department Equipment: Handwork and Machine Sewing	Value of Household Science Department Equipment: Laundry Work	Value of Agricultural Department Equipment	Value of Art Equipment (Middle School)	Total value of special Equipment as per preceding nine columns	Value of School Sites, Buildings and Furniture
	$	$	$	$	$	$	$
58 Markdale							6,750
59 Markham							15,000
60 Meaford							35,000
61 Midland							29,000
62 Milton							85,000
63 Mitchell							10,000
64 Morewood							11,999
65 Mount Forest					75	75	14,408
66 Newburgh					16	16	5,500
67 Newcastle							7,000
68 Newmarket							32,000
69 Niagara							4,500
70 Niagara Falls South	564	150		540		1,254	36,000
71 Norwood							1,500
72 Oakville							50,000
73 Omemee							8,000
74 Orangeville					75	75	24,000
75 Oshawa							40,000
76 Paris							35,000
77 Parkhill							10,000
78 Parry Sound							20,000
79 Pembroke							35,000
80 Penetanguishene							25,000
81 Petrolia							6,000
82 Plantagenet							7,000
83 Port Dover							9,411
84 Port Elgin							10,000
85 Port Hope							60,000
86 Port Perry	316	45		431		792	15,000
87 Port Rowan							6,000
88 Prescott							20,347
89 Richmond Hill							17,000
90 Ridgetown							60,000
91 Rockland							15,000
92 Sault Ste. Marie	995	104				5,137	65,000
93 Shelburne							8,500
94 Simcoe							30,000
95 Smithville							8,000
96 Stirling							20,000
97 Streetsville							12,400
98 Sudbury							48,781
99 Sydenham							40,000
100 Thorold							13,000
101 Tillsonburg							25,000
102 Toronto, Commerce							425,000
103 Toronto, Davenport							
104 Toronto, North							250,000
105 Trenton							75,000
106 Tweed							35,000
107 Uxbridge							10,000
108 Vienna							1,250
109 Walkerton							8,500
110 Wallaceburg							30,000
111 Wardsville							5,000
112 Waterdown							1,000
113 Waterford							20,000
114 Watford							15,000

AND HIGH SCHOOLS (Continued)

EQUIPMENT DESTINATION OF PUPILS, ETC. (Continued)

	Religious and other Exercises				Destination of Pupils							
	Schools in which the Bible or Selections therefrom are used	Schools opened with Prayer	Schools closed with Prayer	Commencement Exercises	Commerce	Agriculture	Law, Medicine, Dentistry or the Church	Teaching	The Trades	Other occupations	Other High Schools or Collegiates	Without occupation
58	1	1	.....	.....	4	6	.....	2	2	4	3	1
59	.....	1	.....	1	5	12	5	6	.....	.....	12	3
60	.....	1	.....	.....	7	9	1	5	.....	8	2	.....
61	.....	1	.....	.....	4	11	6	3	4	27	6	.....
62	1	1	.....	.....	6	13	.....	3	8	18	1	3
63	1	1	.....	1	10	4	.....	2	4	9	2	.....
64	1	1	.....	1	1	3	.....	3	.....	1	3	.....
65	1	1	.....	1	16	12	5	12	2	7	4	3
66	1	1	.....	1	.....	7	.....	6	.....	1	3	2
67	1	1	.....	.....	1	.....	.....	.....	1	1	1	2
68	1	1	.....	1	39	39	1	9	1	3	13	2
69	1	1	.....	.....	1	.....	.....	.....	.....	2	2	.....
70	.....	1	.....	1	12	4	4	1	.....	9	1	2
71	1	1	.....	1	1	3	.....	5	.....	7	7	3
72	.....	1	.....	1	18	5	5	1	2	7	12	2
73	.....	1	.....	1	2	3	1	2	1	1	3	.....
74	.....	1	.....	1	10	14	.....	3	1	6	5	1
75	.....	1	.....	1	27	5	5	4	10	7	3	7
76	1	1	1	1	9	5	3	1	3	12	6	6
77	1	1	.....	.....	4	17	.....	2	3	8	23	.....
78	1	1	.....	1	4	1	.....	1	2	3	1	3
79	.....	1	.....	1	2	14	5	4	9	25	5	11
80	.....	1	.....	.....	6	3	.....	1	2	10	8	3
81	1	1	.....	1	18	6	.....	4	9	6	2	2
82	.....	1	.....	.....	.....	3	.....	3	3	2	6	.....
83	1	1	.....	1	1	2	.....	1	2	10	6	.....
84	1	1	.....	.....	6	.....	.....	2	.....	4	4	.....
85	.....	1	.....	1	7	4	.....	3	1	12	2	2
86	.....	1	.....	1	6	3	.....	5	1	.....	5	12
87	.....	1	.....	1	6	1	.....	.....	.....	3	1	8
88	.....	1	.....	1	12	5	.....	7	5	5	1	11
89	1	1	.....	1	4	9	3	1	2	4	3	.....
90	1	1	.....	.....	4	5	3	12	.....	10	.....	.....
91	.....	1	.....	.....	.....	.....	2	7	1	.....	.....	1
92	.....	1	.....	1	26	1	12	10	20	.....	8	5
93	1	1	.....	.....	3	6	1	6	3	4	5	1
94	1	1	.....	1	20	10	3	11	3	2	5	6
95	1	1	.....	1	4	8	.....	1	6	2	2	5
96	.....	1	.....	.....	5	3	.....	8	3	2	7	.....
97	1	1	.....	1	6	2	.....	3	1	2	6	4
98	1	1	.....	1	18	.....	2	1	9	22	19	11
99	1	1	.....	1	6	3	1	8	.....	3	3	2
100	1	1	.....	1	.....	.....	2	.....	9	12	1	.....
101	1	1	.....	.....	8	5	.....	4	6	10	4	4
102	.....	1	.....	1	385	.....	.....	.....	10	38	14	19
103	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
104	1	1	.....	1	22	.....	7	2	2	1	17	.....
105	1	1	.....	1	22	6	4	9	9	4	13	4
106	1	1	.....	.....	7	1	.....	8	2	7	5	1
107	.....	1	.....	1	11	14	2	6	.....	6	2	4
108	.....	1	.....	.....	4	5	.....	.....	1	.....	3	.....
109	1	1	.....	.....	12	2	2	7	2	5	5	5
110	.....	1	.....	1	7	4	2	6	2	9	6	5
111	1	1	.....	.....	3	6	.....	1	.....	2	4	2
112	.....	1	.....	.....	1	1	.....	4	.....	4	1	6
113	1	1	.....	1	3	2	1	.....	1	13	2	5
114	.....	1	.....	.....	9	18	1	7	2	8	9	2

COLLEGIATE INSTITUTES

II. TABLE M—BOARDS OF EDUCATION, APPROVED

High Schools	Brick or Stone School House	Number of Acres in Playground	Schools under Board of Education	Approved Schools—Grade I and Grade II	Value of Library	Value of Scientific Apparatus	Value of Charts, Maps and Globes	Value of Art Models
					$	$	$	$
115 Welland	B	3	.....	II	574	1,009	85	108
116 Weston	B	4	1	II	525	1,125	252	132
117 Whitby	B	1	1	II	703	1,745	136	92
118 Wiarton	S	2	.....	.....	618	628	75	59
119 Williamstown	B	3	.....	.....	466	693	78	80
120 Winchester	B	1½	.....	II	540	655	100	50
121 Wingham	B	1½	.....	II	506	788	274	78
1 Totals, High Schools	.....	.....	54	7 I; 48 II	68,968	92,315	13,814	9,031
2 Totals, Collegiate Institutes	.....	.....	31	4 I; 19 II	65,362	95,069	10,335	5,893
3 Grand Totals, 1920	.....	.....	85	11 I; 67 II	134,330	187,384	24,149	14,924
4 Grand Totals, 1919	.....	.....	83	13 I; 68 II	129,824	179,906	20,439	14,706
5 Increases	.....	.....	2	.....	4,506	7,478	3,710	218
6 Decreases	.....	.....	.....	2 I; 1 II	.....	.....	.....	.....
7 Percentages	.....	.....	.....	*	16.10	22.46	2.89	1.79

*6.54 per cent. Grade I.; 39.88 per cent. Grade II.; 53.57 per cent. not approved.

COLLEGIATE INSTITUTES

II. TABLE M—BOARDS OF EDUCATION, APPROVED SCHOOLS,

High Schools Continued	Value of Household Science Department Equipment: Cookery, Sanitation and Hygiene	Value of Household Science Department Equipment: Handwork and Machine Sewing	Value of Household Science Department Equipment: Laundry Work	Value of Agricultural Department Equipment	Value of Art Equipment (Middle School)	Total value of special Equipment as per preceeding nine columns	Value of School Sites, Buildings and Furniture
	$	$	$	$	$	$	$
115 Welland	.....	.....	.....	.....	31	31	83,000
116 Weston	.....	.....	.....	.....	.....	.....	80,000
117 Whitby	.....	.....	.....	319	.....	437	40,000
118 Wiarton	.....	.....	.....	.....	.....	.....	15,000
119 Williamstown	.....	.....	.....	258	.....	258	15,000
120 Winchester	.....	.....	.....	.....	.....	.....	19,500
121 Wingham	.....	.....	.....	172	.....	172	20,000
1 Totals, High Schools	3,877	591	25	3,958	395	13,364	3,555,739
2 Totals, Collegiate Institutes	19,369	1,083	1,747	1,889	1,002	60,341	5,259,025
3 Grand Totals, 1920	23,246	1,674	1,772	5,847	1,397	73,705	8,814,764
4 Grand Totals, 1919	22,736	2,225	1,801	6,522	1,604	66,564	8,460,163
5 Increases	510	.....	.....	.....	.....	7,141	354,601
6 Decreases	.....	551	29	675	207	.....	.....
7 Percentages	31.54	2.27	2.40	7.93	1.89	.....	.....

AND HIGH SCHOOLS (Continued)

SCHOOLS, EQUIPMENT, DESTINATION OF PUPILS, ETC. (Continued)

	General Equipment								Value of Manual Training Department Equipment			
	Typewriters	Biological Specimens	Equipment for Physical Culture	Gymnasium (not including equipment)	Museum	Aquarium, Herbarium, etc.	Pictures	Total value of General Equipment	Woodwork	Woodturning	Forging	Machine Shop Practice
	$	$	$	$	$	$	$	$	$	$	$	$
115	600	111	205	8,000	.....	.....	.....	10,692	.....	.....	.....	.....
116	278	104	153	.....	.....	3	.....	2,572	.....	.....	.....	.....
117	435	.....	74	.....	.....	.....	260	3,445	34	.....	84	.....
118	50	65	25	.....	.....	.....	157	1,677	.....	.....	.....	.....
119	50	102	117	200	.....	.....	122	1,908	.....	.....	.....	.....
120	.....	81	45	.....	.....	.....	50	1,521	.....	.....	.....	.....
121	.....	127	177	.....	.....	.....	.....	1,950	.....	.....	.....	.....
1	18,559	10,546	10,066	46,177	1,923	216	11,431	283,046	935	270	322	2,991
2	39,235	12,496	22,121	277,317	4,128	1,167	18,052	551,175	20,795	7,494	2,344	4,618
3	57,794	23,042	32,187	323,494	6,051	1,383	29,483	834,221	21,730	7,764	2,666	7,609
4	47,831	23,505	29,980	326,548	4,891	705	27,588	805,923	16,982	5,005	2,509	7,180
5	9,963	.....	2,207	.....	1,160	678	1,895	28,298	4,748	2,759	157	429
6	.....	463	.....	3,054	.....	.....	.....	.....	.....	.....	.....	.....
7	6.93	2.76	3.86	38.78	.72	.16	3.53	.....	29.48	10.53	3.62	10.32

AND HIGH SCHOOLS (Continued)

EQUIPMENT, DESTINATION OF PUPILS, ETC. (Concluded)

	Religious and other Exercises				Destination of Pupils							
	Schools in which the Bible or Selections therefrom are used	Schools opened with Prayer	Schools closed with Prayer	Commencement Exercises	Commerce	Agriculture	Law, Medicine, Dentistry or the Church	Teaching	The Trades	Other occupations	Other High Schools or Collegiates	Without occupation
115	1	1	.....	1	20	7	3	3	2	5	16	.....
116	1	1	.....	.....	10	10	.....	2	.....	13	17	9
117	.....	1	.....	.....	5	18	1	4	2	1	9	22
118	1	1	.....	1	2	2	4	13	.....	8	1	2
119	.....	1	.....	1	8	9	5	3	.....	2	2	2
120	.....	1	.....	.....	3	4	2	7	.....	3	5	9
121	1	1	.....	1	1	2	1	17	1	2	5	13
1	66	121	3	71	1,313	771	212	547	334	701	610	470
2	31	47	.....	41	2,104	551	480	584	453	1,106	1,022	849
3	97	168	3	112	3,417	1,322	692	1,131	787	1,807	1,632	1,319
4	.....	166	2	113	2,872	1,242	598	1,104	659	1,481	1,259	1,200
5	.....	2	1	.....	545	80	94	27	128	326	373	191
6	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
7	57.73	100.	1.78	66.66	28.22	10.92	5.71	9.34	6.50	14.92	13.48	10.89

COLLEGIATE INSTITUTES

III. TABLE N—ATTENDANCE, PUPILS IN THE SCHOOLS

Collegiate Institutes	Pupils					Number of Pupils in—				Number of Pupils from—		
	Total number of pupils on the roll for the year	Number of pupils admitted for the first time to a secondary school	Boys on the roll for the year	Girls on the roll for the year	Average daily Attendance	Lower School		Middle School	Upper School	Municipalities forming High School District	Municipalities within the County or Territorial Districts	Other Counties or Districts
						F. I	F. II					
1 Barrie	263	90	104	159	221	100	80	59	24	167	95	1
2 Brantford	662	250	299	323	547	276	160	156	30	480	123	19
3 Brockville	300	112	124	176	214	117	116	51	16	213	87	...
4 Chatham	337	119	139	198	263	152	110	51	24	229	106	2
5 Clinton	179	59	66	113	153	61	58	46	14	79	97	3
6 Cobourg	158	49	62	96	133	58	56	35	9	101	57	...
7 Collingwood	221	77	83	138	199	83	66	45	27	174	38	9
8 Fort William	361	145	163	198	302	180	85	88	8	335	22	4
9 Galt	406	162	200	206	365	174	121	88	23	210	162	34
10 Goderich	164	52	56	108	139	62	45	43	14	101	59	4
11 Guelph	408	133	200	208	313	180	94	104	30	327	71	10
12 Hamilton	849	298	411	438	741	364	213	227	45	757	73	19
13 Ingersoll	212	76	98	114	179	90	54	61	7	123	70	19
14 Kingston	611	187	315	296	499	204	157	240	10	479	118	14
15 Kitchener-Waterloo	315	125	152	163	281	137	80	76	22	272	42	1
16 Lindsay	317	115	177	140	283	120	94	77	26	158	126	33
17 London	1,152	422	547	605	998	502	373	233	44	998	148	6
18 Morrisburg	130	32	51	79	104	43	43	32	12	57	73	...
19 Napanee	190	65	56	134	171	73	57	48	12	95	94	1
20 Niagara Falls	251	94	104	147	207	81	72	81	17	201	23	27
21 North Bay	270	88	99	171	235	115	82	66	7	235	10	25
22 Orillia	300	100	121	179	263	115	81	91	13	204	61	35
23 Ottawa	1,360	420	734	626	1,100	537	388	399	36	1,218	96	46
24 Owen Sound	382	147	158	224	343	155	89	120	18	252	101	29
25 Perth	185	58	77	108	152	67	46	62	10	107	72	6
26 Peterborough	420	156	193	227	342	177	129	97	17	344	61	15
27 Picton	236	79	97	139	195	105	65	57	9	104	126	6
28 Port Arthur	239	95	71	168	202	124	78	35	2	236	1	2
29 Renfrew	298	121	134	164	262	149	100	40	9	138	156	4
30 St. Catharines	505	210	254	251	468	259	157	69	20	374	122	9
31 St. Mary's	197	67	82	115	174	89	51	45	12	109	51	37
32 St. Thomas	574	240	281	293	507	229	203	111	31	436	130	8
33 Sarnia	462	184	193	269	401	195	149	106	12	379	83	...
34 Seaforth	212	63	95	117	171	63	54	63	32	86	116	10
35 Smith's Falls	274	79	94	180	221	101	93	67	13	206	27	41
36 Stratford	389	191	180	209	371	177	96	83	33	320	38	31
37 Strathroy	169	54	79	90	148	63	33	53	20	100	68	1
Toronto												
38 ,, Harbord St	691	226	379	312	514	230	198	233	30	688	2	1
39 ,, Humberside	597	235	305	292	492	263	146	161	27	583	8	6
40 ,, Jarvis	556	180	337	219	454	189	160	179	28	552	1	3
41 ,, Malvern Ave	353	184	172	181	310	185	76	81	11	306	47	...
42 ,, Oakwood	850	268	416	434	760	278	246	283	43	777	70	3
43 ,, Parkdale	613	222	299	314	561	214	173	198	28	606	6	1
44 ,, Riverdale	592	267	326	266	530	278	125	171	18	581	11	...
45 Vankleek Hill	147	57	41	106	130	64	50	27	6	57	74	16
46 Windsor	674	293	320	354	605	345	204	111	14	466	208	...
47 Woodstock	430	153	175	255	379	171	115	108	36	203	192	35
Totals	19,421	7,099	9,119	10,302	16,602	7,994	5,521	4,957	949	15,223	3,622	576

AND HIGH SCHOOLS (Continued)

AND IN THE VARIOUS SUBJECTS, ETC.

	No. of Pupils from Families whose Head is occupied as below—								Number of Pupils in the Various Subjects						
	Commerce	Agriculture	Law, Medicine, Dentistry or the Church	Teaching	The Trades	Labouring occupations	Other occupations	Without occupation	English Grammar	English Composition and Rhetoric	English Literature	Canadian History	British History	Ancient History	Mediæval History
1	45	85	13	2	45	50	13	10	162	263	259	190	153	57	15
2	225	92	50	5	163	32	12	43	436	615	615	590	590	156	8
3	51	74	13	1	81	21	58	1	232	296	296	260	168	47	9
4	40	121	9	2	100	41	18	6	234	334	334	316	316	47	12
5	24	94	15	3	20	12	10	1	119	174	174	119	107	46	6
6	12	58	8	1	32	7	26	14	102	156	156	120	120	18	3
7	66	42	10	....	70	11	10	12	149	219	219	128	111	45	10
8	145	22	8	2	76	5	95	8	209	341	341	270	103	61	....
9	121	72	17	13	126	20	34	3	210	398	398	376	202	88	14
10	33	62	17	1	30	10	10	1	107	160	160	150	150	43	5
11	105	62	15	10	88	31	80	17	372	396	396	375	195	103	16
12	324	62	70	16	75	218	52	32	571	834	834	798	798	227	27
13	30	81	9	2	36	15	22	17	161	211	211	120	109	55	5
14	143	99	40	28	122	47	123	9	362	606	611	241	258	181	2
15	177	25	34	6	50	3	.....	20	290	290	310	292	292	76	3
16	53	136	14	3	50	38	15	8	155	299	299	242	164	71	7
17	497	131	66	20	299	26	56	57	866	1,118	1,118	1,098	1,098	233	12
18	8	56	8	....	24	16	17	1	86	128	128	118	118	32	8
19	37	83	7	6	15	21	12	9	88	169	173	165	165	27	3
20	60	31	10	1	58	70	16	5	128	245	245	227	227	81	4
21	73	26	7	7	105	12	35	5	194	268	268	261	261	60	1
22	80	96	14	2	63	29	12	4	196	290	290	261	169	68	5
23	351	84	84	53	272	80	390	46	893	1,344	1,342	582	783	121	16
24	94	82	13	5	94	38	36	20	240	375	368	310	355	115	6
25	47	80	4	3	22	7	3	19	113	182	182	170	162	60	6
26	112	43	20	8	114	55	41	27	201	410	412	241	163	94	1
27	15	144	9	3	21	15	23	6	142	235	236	205	122	57	4
28	55	9	5	2	83	24	44	17	176	238	238	135	89	35	....
29	62	140	4	5	34	39	10	4	249	293	293	176	154	40	5
30	123	56	19	3	182	28	81	13	317	396	396	277	178	69	8
31	30	101	5	6	26	17	8	4	140	197	197	185	185	44	3
32	219	151	30	5	114	49	6	....	452	570	570	428	428	115	13
33	72	55	17	4	109	105	65	35	261	461	449	451	451	105	3
34	17	105	10	4	25	34	7	10	106	195	195	176	176	60	19
35	59	68	10	1	47	21	67	1	170	262	262	187	151	63	6
36	83	55	12	11	108	11	87	22	191	344	359	232	93	44	13
37	19	94	6	3	16	21	10	....	94	161	161	141	91	53	14
38	250	5	25	10	250	.....	76	75	428	685	685	503	301	233	10
39	244	15	24	20	115	20	99	60	409	597	597	342	307	161	10
40	136	9	49	15	125	44	122	56	227	550	550	322	335	187	9
41	113	20	21	7	133	9	17	33	281	353	353	311	149	76	3
42	353	19	77	36	191	31	124	19	524	844	844	406	374	283	28
43	234	7	26	6	213	14	105	8	397	613	613	310	372	91	5
44	162	6	37	23	166	18	166	14	319	592	592	483	296	172	2
45	28	97	4	....	4	5	9	....	114	147	147	114	141	27	6
46	91	39	18	6	196	113	197	14	549	668	668	471	233	114	5
47	90	169	21	2	30	10	93	15	287	430	430	325	325	108	16
	5,408	3,263	1,004	372	4,418	1,543	2,612	801	12,709	18,952	18,974	14,200	12,288	4,349	386

COLLEGIATE INSTITUTES

III. TABLE N—ATTENDANCE, PUPILS IN THE SCHOOLS,

Collegiate Institutes	Number of Pupils in the Various Subjects—Continued											
	Modern History	Geography	Reading	Arithmetic and Mensuration	Algebra	Geometry	Trigonometry	French	Spanish	German	Latin	Greek
1 Barrie	8	180	180	164	228	144	18	213	...	5	180	3
2 Brantford	9	436	276	436	496	331	25	587	...	18	416	3
3 Brockville	4	232	197	232	247	156	12	274	...	10	199	7
4 Chatham	4	269	159	269	334	140	17	225	...	8	188	5
5 Clinton	5	119	119	119	174	113	8	109	...	16	129	1
6 Cobourg	3	126	85	131	157	68	6	98	...	4	94	1
7 Collingwood	6	149	149	149	217	106	20	45	...	5	165	4
8 Fort William	...	265	265	270	244	121	5	301	...	.....	223	...
9 Galt	14	288	210	252	327	189	19	367	13	18	285	2
10 Goderich	6	107	94	107	160	119	10	102	...	16	98	...
11 Guelph	7	272	257	272	397	201	21	318	...	43	325	8
12 Hamilton	27	569	571	571	829	508	35	465	44	77	815	4
13 Ingersoll	3	144	115	174	211	109	7	182	...	13	155	4
14 Kingston	1	359	359	360	511	341	3	603	...	11	484	3
15 Kitchener-Waterloo	4	220	217	220	291	137	13	224	...	52	222	6
16 Lindsay	7	216	155	172	300	159	17	218	...	2	221	5
17 London	12	857	774	858	1,114	566	36	818	...	42	797	20
18 Morrisburg	2	86	86	80	128	85	6	66	...	.....	66	...
19 Napanee	1	112	91	118	147	91	10	136	18	14	117	6
20 Niagara Falls	3	129	85	176	229	144	16	237	...	9	178	...
21 North Bay	1	194	176	195	286	153	4	200	...	6	160	...
22 Orillia	2	196	115	196	289	153	5	214	...	16	224	...
23 Ottawa	14	629	559	816	1,296	706	56	1,234	...	78	913	10
24 Owen Sound	1	244	155	244	332	224	16	248	...	11	216	...
25 Perth	4	113	67	113	178	111	8	178	...	11	140	3
26 Peterborough	1	299	199	230	357	205	17	375	...	20	300	...
27 Picton	3	170	148	170	235	108	7	132	...	3	118	...
28 Port Arthur	...	202	124	226	239	89	2	172	...	9	172	...
29 Renfrew	4	191	191	249	293	102	5	252	...	.....	204	6
30 St. Catharines	11	317	317	317	400	191	16	398	...	42	393	6
31 St. Mary's	3	140	140	140	196	99	8	135	...	11	135	4
32 St. Thomas	12	452	237	452	575	269	17	412	...	30	503	...
33 Sarnia	2	331	297	307	461	221	10	353	56	6	342	1
34 Seaforth	11	106	106	106	195	115	19	190	...	10	185	...
35 Smith's Falls	2	187	170	187	262	133	10	215	...	18	219	3
36 Stratford	7	193	175	255	368	165	21	243	...	10	228	2
37 Strathroy	4	94	91	96	161	106	19	135	...	.....	142	2
38 Toronto, Harbord St	7	428	428	428	687	457	17	682	...	156	656	34
39 Toronto, Humberside	16	409	409	409	597	334	27	548	...	92	517	15
40 Toronto, Jarvis	9	344	218	218	553	366	28	506	...	108	498	5
41 Toronto, Malvern Ave	3	231	185	231	348	348	8	331	...	39	342	...
42 Toronto, Oakwood	28	524	323	323	840	836	29	842	...	153	817	15
43 Toronto, Parkdale	5	397	221	395	610	299	20	606	...	116	570	8
44 Toronto, Riverdale	...	403	319	403	592	314	15	583	...	63	574	8
45 Vankleek Hill	...	114	114	114	147	81	6	130	...	12	134	...
46 Windsor	3	549	345	549	467	252	10	607	...	18	444	...
47 Woodstock	9	287	287	288	356	221	22	388	...	27	392	9
Totals	288	12,879	10,560	12,787	18,043	10,486	726	15,997	131	1,428	14,895	213

AND HIGH SCHOOLS (Continued)

AND IN THE VARIOUS SUBJECTS, ETC. (Continued)

	Number of Pupils in the Various Subjects—Continued											Special Courses				
	Zoology	Botany	Chemistry	Physics	Mineralogy	Writing	Bookkeeping	Stenography	Typewriting	Art	Physical Culture	Commercial	Agriculture	Manual Training	Household Science	Art (Middle School)
1	112	112	181	203	8	119	65	36	36	112	263	36	...	.....	.....	10
2	168	168	156	159	2	140	140	140	140	130	420	140	...	200	223	6
3	106	106	127	170	2	145	56	49	49	113	299	.....	42	.....	.....	...
4	8	3	10	262	2	194	102	66	66	112	336	66	...	92	100	12
5	6	6	54	54	3	119	61	.....	.....	129	179	.....	124	.....	.....	12
6	58	58	63	93	...	87	42	41	57	45	150	.....	23	.....	31	...
7	162	162	100	104	6	149	40	40	40	108	220	40	...	49	99	2
8	116	116	106	301	...	265	118	112	118	206	361	118	...	219	230	...
9	103	104	94	303	...	252	90	90	90	103	401	90	...	119	122	8
10	35	35	68	126	7	72	61	29	12	46	153	30	...	.....	.....	...
11	97	97	148	330	1	83	82	44	45	82	405	56	...	.....	.....	...
12	571	571	255	624	2	361	.....	.....	.....	548	796	.....	...	278	268	...
13	102	103	104	178	...	144	29	29	29	99	212	29	76	59	67	...
14	85	85	211	500	1	205	98	98	101	84	584	98	...	.....	.....	...
15	57	57	33	220	2	196	50	50	55	60	315	.....	...	120	145	3
16	71	71	141	256	4	59	32	32	32	81	312	34	...	.....	.....	11
17	423	423	521	784	7	578	215	214	86	502	1,121	231	...	218	255	20
18	76	76	79	124	4	86	14	18	18	72	129	16	...	.....	.....	...
19	82	82	77	131	3	117	80	41	48	52	190	43	...	.....	.....	6
20	125	125	108	184	1	121	78	79	42	28	251	76	...	50	96	...
21	32	32	61	204	...	140	47	56	56	57	267	56	...	.....	.....	...
22	119	119	152	235	3	138	55	55	55	114	294	55	...	.....	.....	...
23	114	114	628	1,079	4	657	191	189	187	704	1,347	193	...	.....	8	125
24	81	81	178	179	2	108	90	90	90	133	376	90	...	87	121	18
25	63	63	145	152	...	71	27	11	12	98	185	12	...	.....	.....	...
26	88	88	148	233	...	234	88	90	90	80	415	90	...	61	44	4
27	104	104	104	126	2	170	77	59	67	89	235	67	...	.....	.....	...
28	49	49	73	152	...	66	66	66	66	129	239	66	...	77	88	...
29	5	5	152	234	5	184	59	59	59	76	292	59	105	.....	.....	...
30	109	108	178	390	1	208	19	.....	.....	95	406	99	...	.....	.....	4
31	114	114	17	39	...	89	56	26	26	63	197	26	...	.....	.....	9
32	465	465	125	279	4	328	164	164	91	288	570	140	204	16	228	4
33	92	92	152	346	2	241	107	107	107	102	457	107	...	.....	.....	7
34	120	120	120	120	11	106	.....	.....	.....	.....	204	.....	...	.....	.....	...
35	155	155	135	226	2	118	34	34	34	133	271	41	...	66	128	...
36	8	231	55	144	7	68	68	68	68	156	340	67	...	89	98	10
37	82	86	94	141	2	100	95	12	13	88	169	14	...	.....	.....	3
38	375	375	381	612	...	230	38	.....	.....	270	670	.....	...	.....	.....	...
39	78	78	123	495	...	293	11	.....	.....	105	586	.....	...	.....	.....	8
40	223	223	322	502	...	.....	80	.....	.....	187	540	.....	...	.....	.....	9
41	234	234	83	159	...	120	100	.....	.....	286	351	.....	...	40	65	15
42	258	258	260	483	6	149	149	.....	.....	202	846	.....	...	261	265	24
43	271	271	356	566	...	.....	218	.....	.....	245	613	.....	...	.....	.....	...
44	176	176	213	557	...	278	21	.....	.....	332	586	.....	...	212	191	18
45	114	114	77	145	...	114	110	14	3	114	145	14	..	.....	.....	...
46	4	4	110	108	4	205	205	205	83	152	654	205	...	229	237	2
47	174	174	126	291	8	287	69	68	68	144	425	70	...	124	168	2
	6270	6,493	7,204	13,303	118	8,194	3,697	2,581	2,239	7,154	18,777	2,574	574	2,666	3,277	352

COLLEGIATE INSTITUTES

III. TABLE N—ATTENDANCE, PUPILS IN THE SCHOOLS,

High Schools	Pupils					Number of Pupils in—				Number of Pupils from—		
	Total number of pupils on the roll for the year	No. of pupils admitted for the first time to a secondary school	Boys on the roll for the year	Girls on the roll for the year	Average daily Attendance	Lower School		Middle School	Upper School	Municipalities forming High School District	Municipalities within the County or Territorial District	Other Counties or Districts
						F. I	F. II					
1 Alexandria	116	52	42	74	97	69	30	17	...	108	6	2
2 Alliston	88	29	24	64	79	33	29	26	...	48	32	8
3 Almonte	93	29	41	52	80	42	17	28	6	56	35	2
4 Amherstburg	48	18	18	30	36	18	16	14	...	26	22	...
5 Arnprior	207	68	81	126	163	93	54	55	5	127	51	29
6 Arthur	85	30	30	55	70	36	23	21	5	40	45	...
7 Athens	149	49	65	84	124	56	49	44	...	70	77	2
8 Aurora	111	40	49	62	98	43	29	35	4	67	44	...
9 Avonmore	57	21	19	38	49	29	16	12	...	42	15	...
10 Aylmer	119	35	44	75	97	45	35	25	14	43	75	1
11 Beamsville	105	40	53	52	85	42	29	22	12	41	60	4
12 Belleville	351	134	147	204	296	135	102	86	28	266	73	11
13 Bowmanville	137	55	49	88	121	56	44	29	8	81	57	...
14 Bracebridge	102	48	42	60	91	45	33	24	...	64	38	...
15 Bradford	61	20	30	31	47	23	24	14	...	22	38	1
16 Brampton	167	61	65	102	120	61	46	49	11	72	85	10
17 Brighton	83	34	32	51	74	37	28	18	...	43	40	...
18 Burlington	74	33	31	43	56	34	20	20	...	43	23	8
19 Caledonia	119	40	34	85	99	44	37	38	...	42	50	27
20 Campbellford	158	40	68	90	120	41	68	36	13	81	68	9
21 Carleton Place	147	49	57	90	131	64	35	48	...	93	39	15
22 Cayuga	74	14	28	46	65	34	20	16	4	36	38	...
23 Chatsworth	32	15	15	17	25	15	7	10	...	31	.....	1
24 Chesley	109	32	53	56	99	35	37	29	8	54	41	14
25 Chesterville	105	28	44	61	85	41	40	24	...	46	49	10
26 Colborne	61	25	29	32	48	24	15	22	...	28	32	1
27 Cornwall	269	97	107	162	226	108	81	60	20	130	115	24
28 Deseronto	48	16	25	23	42	19	16	13	...	36	9	3
29 Dundalk	69	27	27	42	55	27	17	21	4	28	30	11
30 Dundas	147	67	66	81	126	72	38	30	7	98	43	6
31 Dunnville	138	45	57	81	119	45	42	41	10	68	52	18
32 Durham	121	50	44	77	109	55	42	22	2	54	66	1
33 Dutton	108	35	47	61	95	40	30	26	12	31	77	...
34 Elora	49	11	15	34	34	15	18	16	...	17	30	2
35 Essex	144	43	59	85	110	52	49	30	13	38	106	...
36 Exeter	98	36	38	60	81	36	33	29	...	37	59	2
37 Fergus	111	33	60	51	79	36	38	25	12	53	56	2
38 Flesherton	53	13	18	35	46	15	24	14	...	49	4	...
39 Forest	99	29	49	50	86	37	30	28	4	44	55	...
40 Fort Frances	90	45	21	69	72	44	33	13	...	63	27	...
41 Gananoque	123	42	54	69	98	42	53	28	...	88	26	9
42 Georgetown	121	48	62	59	93	51	33	29	8	49	41	31
43 Glencoe	80	27	23	57	54	27	22	28	3	23	52	5
44 Gravenhurst	33	12	17	16	27	12	10	7	4	25	8	...
45 Grimsby	128	43	61	67	104	45	39	44	...	50	60	18
46 Hagersville	103	33	42	61	85	41	31	29	2	50	53	...
47 Haileybury	150	68	78	72	123	74	47	24	5	66	84	...
48 Harriston	112	43	58	54	96	40	25	33	14	46	37	29
49 Hawkesbury	97	30	41	56	81	34	33	27	3	70	27	...
50 Iroquois	120	38	42	78	105	49	29	34	8	40	77	3
51 Kemptville	134	52	49	85	111	54	41	33	6	36	75	23
52 Kenora	122	49	44	78	99	53	43	26	...	121	1	...
53 Kincardine	151	53	59	92	122	56	46	36	13	73	78	...
54 Leamington	224	78	99	125	191	85	70	58	11	99	97	28
55 Listowel	142	55	72	70	129	63	27	40	12	65	61	16
56 Lucan	88	27	49	39	77	28	34	24	2	29	59	...
57 Madoc	97	34	31	66	84	42	27	28	...	42	53	2

AND HIGH SCHOOLS (Continued)

AND IN THE VARIOUS SUBJECTS, ETC. (Continued)

	Number of Pupils from Families whose Head is occupied as below								Number of Pupils in the Various Subjects						
	Commerce	Agriculture	Law, Medicine, Dentistry or the Church	Teaching	The Trades	Labouring occupations	Other occupations	Without occupations	English Grammar	English Composition and Rhetoric	English Literature	Canadian History	British History	Ancient History	Medieval History
1	7	64	4	2	9	4	24	2	99	.....	116	116	46	17	....
2	11	37	2	2	10	20	4	2	62	88	78	88	55	26	....
3	25	39	5	....	16	3	1	4	59	92	92	87	87	28	6
4	6	21	2	2	6	6	4	1	33	34	34	31	27	14	...
5	32	44	7	2	48	30	41	3	147	203	203	180	180	55	3
6	9	42	3	....	4	2	25	....	59	80	80	80	44	21	....
7	12	104	2	1	20	5	5	....	105	149	149	149	149	44	....
8	12	42	13	2	13	7	15	7	72	111	111	107	107	35	2
9	3	48	3	....	2	1	.....	....	45	57	57	57	27	11	....
10	16	73	4	....	17	7	2	....	80	118	118	80	60	25	13
11	10	50	11	4	19	6	2	3	71	105	105	64	51	22	6
12	82	80	15	4	101	11	50	8	215	337	337	273	167	83	10
13	25	61	7	1	12	15	10	6	97	137	137	86	74	29	3
14	12	60	1	1	4	24	.....	....	80	102	102	102	66	32	....
15	11	36	5	....	3	2	1	3	47	61	61	61	61	14	....
16	26	68	6	1	21	25	8	12	107	165	165	156	156	49	1
17	7	44	6	4	6	8	6	2	65	83	83	83	46	18	....
18	7	34	4	....	5	10	11	3	53	74	74	74	53	20	....
19	6	56	7	2	16	25	3	4	81	119	118	82	75	38	....
20	41	63	5	....	20	27	.....	2	104	151	151	104	98	35	6
21	36	56	4	1	21	25	2	2	99	146	146	146	82	47	....
22	9	37	7	1	7	11	2	....	54	71	71	69	35	15	1
23	.....	27	1	1	1	1	1	....	22	32	32	32	17	10	....
24	26	53	4	....	18	2	5	1	72	108	108	100	66	29	....
25	20	64	.....	....	10	8	3	....	81	105	104	105	105	24	....
26	12	25	3	....	9	4	2	6	39	61	61	61	37	29	....
27	39	82	16	3	75	23	28	3	175	254	251	207	103	29	12
28	4	10	2	....	12	8	7	5	35	48	48	48	48	13	....
29	3	39	5	2	6	6	8	....	44	69	69	67	67	19	4
30	26	45	7	....	49	7	10	3	110	147	147	72	79	30	....
31	22	69	8	....	22	17	.....	....	87	135	135	128	128	41	5
32	23	63	.....	3	11	7	6	8	97	119	119	119	64	22	....
33	1	65	5	....	14	4	19	....	70	100	100	66	56	26	4
34	.....	29	2	....	2	7	9	....	33	49	49	49	34	16	....
35	39	70	6	1	8	8	12	....	101	135	135	131	131	30	6
36	21	53	2	1	13	1	5	2	69	96	96	63	70	28	....
37	10	65	3	1	29	2	1	....	74	101	101	95	95	21	2
38	4	36	.....	....	9	3	.....	1	53	53	53	53	38	14	....
39	12	54	8	....	2	8	.....	15	67	99	99	95	62	28	4
40	15	21	5	1	23	8	11	6	77	88	88	88	46	11	....
41	15	36	2	1	22	32	11	4	95	123	123	123	81	28	....
42	21	49	3	1	18	17	10	2	74	121	121	113	62	29	....
43	10	40	2	....	10	9	6	3	49	80	80	80	50	28	1
44	14	5	2	....	10	2	.....	....	22	33	33	29	17	7	....
45	20	50	5	1	25	20	4	3	84	128	128	128	83	44	....
46	15	54	5	1	7	17	4	....	76	103	103	101	101	28	1
47	15	9	4	4	56	33	24	5	109	146	146	101	75	19	....
48	17	60	8	2	12	3	7	3	65	107	107	96	56	32	3
49	15	33	6	....	24	16	2	1	67	89	89	86	86	19	3
50	21	74	5	....	7	1	10	2	77	118	118	82	63	34	9
51	21	87	6	....	15	3	1	1	95	133	133	127	127	33	4
52	35	1	3	1	3	68	6	5	96	122	122	72	69	26	....
53	19	88	8	....	16	8	12	....	102	147	147	102	82	36	6
54	40	114	9	2	35	8	4	12	155	220	222	210	141	55	5
55	22	65	9	4	24	6	4	8	90	138	138	130	130	40	8
56	14	56	7	....	2	3	5	1	62	88	88	52	58	24	2
57	16	44	5	1	10	7	6	8	69	94	94	67	52	23	....

COLLEGIATE INSTITUTES AND

III. TABLE N—ATTENDANCE, PUPILS IN THE SCHOOLS

High Schools	Number of Pupils in the Various Subjects—Continued											
	Modern History	Geography	Reading	Arithmetic and Mensuration	Algebra	Geometry	Trigonometry	French	Spanish	German	Latin	Greek
1 Alexandria	...	99	99	99	116	47	...	116	...	.....	114	...
2 Alliston	...	62	62	62	88	55	...	71	...	.....	65	...
3 Almonte	6	59	59	59	93	51	6	67	...	1	73	...
4 Amherstburg	...	33	34	33	48	30	...	45	...	.....	36	...
5 Arnprior	3	147	147	147	201	113	4	190	...	24	179	...
6 Arthur	5	59	59	59	80	44	...	35	...	4	48	...
7 Athens	...	105	105	105	149	93	...	87	...	.....	102	...
8 Aurora	...	72	72	72	111	68	4	104	...	1	106	1
9 Avonmore	...	45	45	45	57	27	...	50	...	.....	38	...
10 Aylmer	4	80	80	80	118	73	12	73	...	.....	86	...
11 Beamsville	...	71	71	71	105	105	12	88	...	.....	90	...
12 Belleville	6	236	236	236	321	179	12	258	...	12	275	1
13 Bowmanville	...	100	56	98	100	44	7	90	...	.....	86	...
14 Bracebridge	...	80	80	80	102	66	...	83	...	.....	88	...
15 Bradford	...	47	47	14	61	38	...	60	...	.....	60	...
16 Brampton	4	107	49	107	165	165	9	165	...	25	160	4
17 Brighton	...	65	65	65	83	46	...	76	...	.....	71	...
18 Burlington	...	53	53	53	74	41	...	71	...	.....	68	...
19 Caledonia	...	81	81	81	119	75	...	105	...	.....	102	...
20 Campbellford	4	104	104	104	139	98	9	140	...	.....	130	...
21 Carleton Place	...	99	99	99	146	146	...	139	...	.....	141	...
22 Cayuga	4	54	54	54	70	35	...	50	...	.....	66	...
23 Chatsworth	...	22	22	22	32	17	...	27	...	.....	30	...
24 Chesley	8	72	72	72	109	73	7	91	...	8	91	...
25 Chesterville	...	81	81	81	104	104	...	82	...	.....	81	...
26 Colborne	...	39	29	39	61	37	...	59	...	.....	59	...
27 Cornwall	9	184	107	184	253	139	11	182	...	3	188	...
28 Deseronto	...	35	35	35	48	29	...	45	...	.....	36	...
29 Dundalk	4	44	44	44	68	42	...	54	...	.....	59	...
30 Dundas	7	110	110	110	106	68	...	144	...	.....	113	...
31 Dunnville	...	87	87	87	135	90	8	129	...	1	135	19
32 Durham	...	97	97	97	120	65	...	93	...	2	100	...
33 Dutton	8	70	70	70	100	60	4	60	...	.....	67	...
34 Elora	...	33	33	33	49	34	...	40	...	.....	39	...
35 Essex	8	101	131	102	136	135	4	118	...	.....	126	...
36 Exeter	...	69	69	70	97	61	...	64	...	.....	66	...
37 Fergus	3	74	74	74	111	55	7	97	...	.....	93	...
38 Flesherton	...	39	39	40	53	38	...	38	...	.....	37	...
39 Forest	...	67	67	67	99	62	4	83	...	.....	88	...
40 Fort Frances	...	76	77	77	87	43	...	61	...	.....	53	...
41 Gananoque	...	95	95	95	123	81	...	103	...	.....	96	...
42 Georgetown	...	84	51	84	118	67	5	88	...	.....	82	...
43 Glencoe	2	49	49	49	77	50	...	30	...	1	30	...
44 Gravenhurst	...	22	22	22	33	33	2	29	...	.....	30	...
45 Grimsby	...	84	84	84	128	83	...	118	...	4	116	...
46 Hagersville	...	76	76	76	103	62	2	90	...	.....	90	...
47 Haileybury	4	118	86	109	14	74	17	126	...	.....	89	...
48 Harriston	3	65	65	28	108	69	7	89	...	11	94	...
49 Hawkesbury	...	67	67	67	90	53	3	94	...	.....	81	...
50 Iroquois	...	77	77	77	118	72	9	96	...	15	104	...
51 Kemptville	...	95	95	97	133	79	5	121	...	.....	128	3
52 Kenora	...	96	96	96	122	51	...	56	...	.....	58	...
53 Kincardine	4	102	102	102	147	91	12	130	...	.....	127	...
54 Leamington	6	155	155	156	155	71	7	209	...	3	204	...
55 Listowel	3	90	90	90	138	71	8	131	...	.....	126	...
56 Lucan	...	62	62	62	88	60	2	61	...	.....	72	...
57 Madoc	...	69	69	69	93	51	...	54	...	.....	55	...

HIGH SCHOOLS (Continued)

AND IN THE VARIOUS SUBJECTS, ETC. (Continued)

	Number of Pupils in the Various Subjects—Continued											Special Courses				
	Zoology	Botany	Chemistry	Physics	Mineralogy	Writing	Bookkeeping	Stenography	Typewriting	Art	Physical Culture	Commercial	Agriculture	Manual Training	Household Science	Art (Middle School)
1	99	99	17	116	...	99	.....	.....	.....	99	116	.....	...	.....	.....	...
2	62	62	55	88	...	62	.....	.....	.....	62	88	.....	...	.....	.....	..
3	59	59	87	85	...	59	.....	.....	.....	59	91	.....	...	.....	.....	...
4	33	33	29	30	...	34	.....	.....	.....	34	47	.....	...	.....	.....	...
5	.....	.....	55	55	...	147	.....	.....	.....	147	198	.....	...	.....	.....	...
6	64	64	50	80	5	36	.....	.....	.....	59	85	.....	69	.....	.....	...
7	105	105	93	148	...	56	.....	.....	.....	104	149	.....	82	.....	.....	...
8	72	72	64	109	...	72	.....	.....	.....	72	111	.....	...	.....	.....	...
9	45	45	27	57	...	45	.....	.....	.....	45	57	.....	...	.....	.....	...
10	64	64	64	117	4	80	.....	.....	.....	80	119	.....	...	.....	.....	...
11	71	71	49	101	...	42	.....	.....	.....	59	105	.....	12	.....	2	...
12	5	5	3	12	4	185	97	64	66	147	348	64	49	.....	67	5
13	.....	.....	29	37	...	56	.....	.....	.....	92	137	.....	95	.....	.....	...
14	80	80	66	102	...	80	.....	.....	.....	80	102	.....	...	.....	.....	...
15	47	47	38	61	...	47	.....	.....	.....	47	61	.....	...	.....	.....	...
16	107	107	49	165	...	60	15	.....	.....	103	.....	.....	...	.....	.....	...
17	55	55	46	83	...	65	.....	.....	.....	55	82	.....	...	.....	.....	...
18	53	53	41	74	...	33	.....	.....	.....	53	74	.....	...	.....	.....	...
19	81	81	75	119	...	81	.....	.....	.....	81	119	.....	...	.....	.....	...
20	106	106	98	139	2	109	46	11	11	104	155	11	...	.....	.....	...
21	99	99	82	146	...	64	.....	.....	.....	99	147	.....	...	.....	.....	...
22	58	58	40	69	1	54	34	.....	.....	54	74	.....	...	.....	.....	...
23	22	22	17	32	...	22	.....	.....	.....	22	32	.....	...	.....	.....	...
24	73	73	67	109	...	72	.....	.....	.....	79	107	.....	...	.....	.....	...
25	74	74	64	64	...	81	.....	.....	.....	81	104	.....	...	.....	.....	...
26	38	38	36	36	...	24	.....	.....	.....	30	61	.....	...	.....	.....	...
27	160	160	140	221	8	122	112	39	39	108	263	39	...	.....	.....	...
28	35	35	29	48	...	35	.....	.....	.....	33	48	.....	...	.....	.....	...
29	44	44	38	65	...	44	.....	.....	.....	44	69	.....	...	.....	.....	...
30	83	83	64	64	7	110	38	34	34	76	147	34	...	.....	.....	...
31	60	60	40	43	...	87	.....	.....	.....	60	137	.....	...	.....	.....	...
32	98	98	64	119	...	97	.....	.....	.....	97	121	.....	...	.....	.....	...
33	78	78	64	100	8	40	.....	.....	.....	70	107	.....	...	.....	.....	...
34	33	33	34	49	...	33	.....	.....	.....	31	49	.....	...	.....	.....	...
35	105	105	137	136	136	131	.....	.....	.....	131	141	.....	95	.....	.....	...
36	56	56	62	62	...	36	.....	.....	.....	63	98	.....	...	.....	.....	...
37	77	77	61	67	3	36	.....	.....	.....	74	108	.....	...	.....	.....	...
38	39	39	.....	38	...	39	.....	.....	.....	40	53	4	...	.....	.....	...
39	67	67	28	99	...	67	.....	.....	.....	67	99	.....	...	.....	.....	...
40	76	76	43	87	...	73	63	29	29	76	89	29	...	.....	.....	...
41	95	95	81	123	...	95	15	.....	24	88	123	.....	...	.....	.....	...
42	64	64	65	116	...	84	9	9	15	61	121	.....	...	.....	.....	...
43	51	51	50	50	...	49	.....	.....	.....	49	80	.....	...	.....	.....	...
44	22	22	17	29	...	22	7	.....	.....	22	33	.....	...	.....	.....	...
45	84	84	83	128	...	84	.....	.....	.....	84	128	.....	...	.....	.....	...
46	76	76	101	101	...	76	.....	.....	.....	76	103	.....	...	.....	.....	...
47	46	46	110	139	30	121	.....	.....	.....	47	149	.....	...	.....	.....	...
48	66	66	63	99	4	40	.....	.....	.....	52	110	.....	...	.....	.....	...
49	67	67	52	89	...	87	.....	.....	.....	67	97	.....	...	.....	.....	...
50	77	77	62	62	...	77	.....	.....	12	77	120	.....	...	.....	.....	...
51	95	95	74	131	...	95	.....	.....	.....	91	134	.....	...	.....	.....	...
52	61	61	51	87	...	78	67	42	42	61	122	42	...	.....	.....	...
53	106	106	86	147	4	102	.....	.....	.....	109	150	.....	102	.....	.....	...
54	158	159	131	130	3	155	.....	.....	.....	137	224	.....	101	.....	.....	...
55	93	93	130	135	3	90	.....	.....	6	88	141	.....	...	.....	.....	...
56	27	27	58	88	...	28	.....	.....	.....	62	88	.....	...	.....	.....	...
57	69	69	52	94	...	69	.....	.....	.....	74	97	.....	...	.....	.....	...

COLLEGIATE INSTITUTES

III. TABLE N—ATTENDANCE, PUPILS IN THE SCHOOLS, AND

High Schools	Pupils					Number of Pupils in—				Number of Pupils from—		
	Total number of pupils on the roll for the year	No. of pupils admitted for the first time to a secondary school	Boys on the roll for the year	Girls on the roll for the year	Average daily Attendance	Lower School		Middle School	Upper School	Municipalities forming High School District	Municipalities within the County or Territorial District	Other Counties or Districts
						F. I	F. II					
58 Markdale	54	25	23	31	48	27	20	7	...	50	4	...
59 Markham	114	36	49	65	92	36	38	25	15	22	81	11
60 Meaford	122	30	51	71	110	46	39	30	7	81	38	3
61 Midland	124	53	52	72	108	64	23	29	8	111	13	...
62 Milton	100	41	36	64	71	44	33	23	...	51	49	...
63 Mitchell	99	34	43	56	87	37	31	28	3	59	40	...
64 Morewood	46	13	23	23	37	14	18	14	...	37	1	8
65 Mount Forest	97	30	37	60	76	32	38	22	5	47	19	31
66 Newburgh	79	22	23	56	63	28	32	19	...	23	56	...
67 Newcastle	20	7	10	10	18	8	7	5	...	10	10	...
68 Newmarket	193	76	98	95	154	99	36	45	13	86	102	5
69 Niagara	39	17	16	23	32	17	11	11	...	28	11	...
70 Niagara Falls S.	143	61	68	75	120	68	48	26	1	85	58	...
71 Norwood	84	30	33	51	77	31	34	19	...	35	41	8
72 Oakville	135	58	62	73	112	56	47	32	...	67	68	...
73 Omemee	52	22	17	35	44	25	13	14	...	25	17	10
74 Orangeville	154	62	61	93	118	68	34	46	6	67	48	39
75 Oshawa	254	112	126	128	228	116	74	50	14	203	38	13
76 Paris	120	53	45	75	111	65	29	19	7	73	46	1
77 Parkhill	107	36	44	63	91	45	32	24	6	45	45	17
78 Parry Sound	130	70	51	79	110	70	37	23	...	116	13	1
79 Pembroke	171	37	95	76	134	57	53	55	6	145	24	2
80 Penetanguis'ne	59	28	23	36	51	36	18	5	...	56	1	2
81 Petrolia	143	51	54	89	122	55	44	44	...	86	57	...
82 Plantagenet	45	13	21	24	37	13	24	8	...	30	14	1
83 Port Dover	58	18	23	35	48	18	24	16	...	39	11	8
84 Port Elgin	70	28	20	50	62	30	24	16	...	35	35	...
85 Port Hope	137	51	47	90	117	51	50	27	9	96	40	1
86 Port Perry	90	38	46	44	76	43	21	19	7	31	43	16
87 Port Rowan	25	9	10	15	19	9	6	10	...	20	5	...
88 Prescott	115	45	53	62	93	51	37	20	7	79	35	1
89 Richmond Hill	87	43	41	46	74	45	22	20	...	19	68	...
90 Ridgetown	139	49	58	81	105	46	63	23	7	68	67	4
91 Rockland	24	10	12	12	16	11	4	9	...	18	6	...
92 Sault Ste. Marie	342	146	147	195	307	170	95	68	9	326	7	9
93 Shelburne	59	10	28	31	49	12	25	22	...	32	24	3
94 Simcoe	167	65	72	95	123	60	41	59	7	65	102	...
95 Smithville	57	16	25	32	46	21	23	13	...	28	19	10
96 Stirling	95	47	34	61	77	49	30	13	3	31	63	1
97 Streetsville	40	21	18	22	33	22	11	7	...	11	26	3
98 Sudbury	177	75	67	110	143	85	55	33	4	136	36	5
99 Sydenham	128	32	54	74	112	41	48	34	5	126	.....	2
100 Thorold	73	40	35	38	60	41	16	16	...	48	17	8
101 Tillsonburg	124	46	46	78	103	50	36	35	3	69	29	26
102 Toronto—												
" Commerce	1,049	553	299	750	983	579	295	*175	...	1,035	13	1
103 " Davenport	205	89	116	89	180	98	76	31	...	205	.....	...
104 " North	337	147	173	164	274	147	83	96	11	309	28	...
105 Trenton	150	54	61	89	128	61	33	53	3	109	14	27
106 Tweed	77	26	25	52	62	27	19	27	4	43	34	...
107 Uxbridge	151	42	60	91	127	65	42	32	12	50	96	5
108 Vienna	29	13	12	17	21	13	8	8	...	26	.....	3
109 Walkerton	106	41	45	61	90	55	27	14	10	51	54	1
110 Wallaceburg	139	52	57	82	111	66	42	28	3	100	22	17
111 Wardsville	35	13	12	23	28	15	10	10	...	12	14	9
112 Waterdown	55	18	25	30	37	20	21	14	...	25	23	7

AND HIGH SCHOOLS (Continued)

IN THE VARIOUS SUBJECTS, ETC. (Continued)

Number of Pupils from Families whose Head is occupied as below									Number of Pupils in the Various Subjects						
	Commerce	Agriculture	Law, Medicine, Dentistry or the Church	Teaching	The Trades	Labouring occupations	Other occupations	Without occupations	English Grammar	English Composition and Rhetoric	English Literature	Canadian History	British History	Ancient History	Mediæval History
58	7	27	....	1	6	7	3	3	47	54	54	54	54	7	....
59	15	64	12	....	7	7	5	4	74	109	109	99	94	25	11
60	30	41	5	....	23	14	8	1	67	122	122	112	66	30	4
61	26	18	5	1	40	15	19	....	87	123	123	111	111	28	4
62	10	47	6	3	15	6	7	6	77	99	99	99	55	22	....
63	26	38	4	1	20	5	5	....	68	99	99	95	58	27	....
64	3	32	1	4	3	3	....	....	32	45	45	45	31	13	....
65	15	51	7	....	13	....	1	10	70	97	97	91	57	22	2
66	4	51	1	....	9	2	11	1	60	79	79	79	79	19	....
67	3	13	1	....	2	....	....	1	15	20	20	13	12	5	....
68	51	59	12	3	20	44	1	3	112	190	190	176	176	46	8
69	4	14	....	2	9	3	4	3	28	39	39	39	22	11	....
70	25	33	4	3	39	12	27	....	98	134	133	134	134	23	1
71	7	48	2	2	12	7	4	2	65	84	84	84	84	19	....
72	21	50	8	....	29	5	8	14	103	135	135	135	79	32	....
73	3	37	3	1	8	....	....	....	38	52	52	52	52	14	....
74	36	60	10	1	20	3	18	6	102	152	152	105	89	45	2
75	36	42	27	....	73	45	23	8	170	254	254	220	124	53	4
76	15	45	5	....	35	8	12	....	94	120	120	94	48	19	7
77	17	58	1	3	12	2	14	....	77	104	104	101	56	24	3
78	22	9	7	....	32	28	28	4	107	130	130	130	60	23	....
79	29	29	9	1	31	13	38	21	85	171	171	126	105	50	2
80	7	2	4	....	18	6	22	....	54	59	59	59	23	5	....
81	15	42	3	....	37	27	17	2	99	140	140	99	85	41	....
82	1	30	1	....	4	3	5	1	37	45	45	45	32	8	....
83	3	29	2	1	9	8	5	1	42	58	58	58	40	16	....
84	6	36	3	....	15	2	5	3	54	51	70	70	40	15	....
85	22	30	3	1	35	28	9	9	82	134	134	128	131	27	....
86	18	46	7	1	7	5	....	6	64	86	86	83	40	19	4
87	....	9	4	....	2	....	10	....	15	25	25	25	16	10	....
88	23	39	1	....	21	12	15	4	88	108	108	108	57	20	....
89	6	36	7	....	21	13	3	1	67	87	87	67	42	20	....
90	32	39	17	1	23	12	13	2	109	134	134	132	132	23	2
91	4	6	....	....	4	8	2	....	15	24	24	24	13	9	....
92	102	19	23	5	128	7	40	18	248	327	327	196	150	64	....
93	15	24	12	....	....	3	2	3	37	56	56	56	44	19	....
94	41	89	14	4	15	4	....	....	101	163	163	160	160	58	3
95	10	24	8	....	4	6	....	5	44	57	57	34	34	13	....
96	9	58	5	....	4	3	10	6	79	95	95	92	43	13	3
97	9	19	1	1	4	3	3	....	33	40	40	29	18	7	....
98	33	3	12	2	42	51	34	....	140	170	170	170	88	28	....
99	14	76	6	....	5	6	11	10	89	123	124	....	102	34	....
100	10	11	4	....	37	....	10	1	57	73	73	73	32	16	....
101	34	45	4	2	12	8	16	3	86	123	123	121	121	36	....
102	339	20	10	10	460	33	135	42	579	1,049	1,049	579	470	144	144
103	88	....	10	10	49	....	34	14	174	205	205	129	107	31	....
104	94	15	31	14	110	15	36	22	230	337	337	218	179	96	3
105	22	40	7	3	45	17	11	5	94	150	150	147	147	53	3
106	14	34	2	1	14	8	3	1	46	73	73	73	46	27	....
107	36	97	3	1	5	4	2	3	107	147	147	96	139	32	4
108	....	25	....	1	2	....	1	....	21	29	29	29	16	8	....
109	16	41	6	2	12	9	15	5	80	104	104	94	39	14	9
110	33	39	9	3	17	31	5	2	105	136	137	136	136	28	....
111	9	18	4	....	1	....	1	2	25	35	35	35	25	10	....
112	4	33	3	....	11	1	2	1	42	54	55	54	37	14	....

COLLEGIATE INSTITUTES AND

III. TABLE N—ATTENDANCE, PUPILS IN THE SCHOOLS,

High Schools	Number of Pupils in the Various Subjects—Continued											
	Modern History	Geography	Reading	Arithmetic and Mensuration	Algebra	Geometry	Trigonometry	French	Spanish	German	Latin	Greek
58 Markdale	....	47	47	47	54	27	.....	50	...	.....	49	...
59 Markham	4	74	74	74	111	75	12	100	...	2	99	...
60 Meaford	....	75	122	80	122	66	7	87	...	.....	92	...
61 Midland	....	87	64	87	123	59	8	115	...	.....	112	...
62 Milton	....	77	77	77	99	55	.....	63	...	.....	56	...
63 Mitchell	....	68	68	68	99	62	3	95	...	.....	89	...
64 Morewood	....	32	32	32	46	31	.....	39	...	.....	39	...
65 Mount Forest	....	70	70	70	96	96	2	84	...	.....	87	...
66 Newburgh	....	60	60	60	79	51	.....	56	...	.....	61	...
67 Newcastle	....	15	15	15	20	12	.....	14	...	.....	12	...
68 Newmarket	3	133	125	120	189	82	10	128	...	5	119	...
69 Niagara	....	28	28	28	39	22	.....	38	...	5	36	...
70 Niagara Falls S.	1	109	98	116	109	56	1	83	14	.....	84	...
71 Norwood	....	65	65	65	84	53	.....	81	...	.....	81	...
72 Oakville	....	103	103	103	118	71	.....	115	...	.....	121	...
73 Omemee	....	38	38	38	52	27	.....	38	...	.....	41	...
74 Orangeville	2	102	102	102	150	83	2	125	...	6	130	3
75 Oshawa	4	170	127	170	171	81	10	249	...	14	160	10
76 Paris	1	94	94	94	120	55	7	67	...	1	85	1
77 Parkhill	....	78	77	78	106	62	5	53	...	.....	60	1
78 Parry Sound	....	107	107	107	130	60	.....	106	...	1	112	...
79 Pembroke	2	110	74	110	146	101	4	147	...	5	127	2
80 Penetanguis'ne	....	54	54	54	59	23	.....	59	...	.....	28	...
81 Petrolia	....	99	99	102	141	88	.....	103	...	.....	93	...
82 Plantagenet	....	37	37	37	45	32	.....	43	...	.....	42	...
83 Port Dover	....	42	42	42	58	40	.....	45	...	.....	45	...
84 Port Elgin	....	54	54	54	70	40	.....	50	...	.....	58	...
85 Port Hope	3	101	82	101	133	133	4	96	...	13	88	7
86 Port Perry	3	52	54	53	90	47	6	77	...	4	71	...
87 Port Rowan	....	15	15	15	25	16	.....	25	...	.....	22	...
88 Prescott	7	88	88	88	108	57	.....	94	...	.....	104	...
89 Richmond Hill	....	67	67	67	87	42	.....	62	...	.....	57	...
90 Ridgetown	3	109	109	109	135	62	4	99	...	2	105	...
91 Rockland	....	15	15	15	24	9	.....	24	...	.....	24	...
92 Sault Ste. Marie	3	259	248	261	322	155	4	257	...	12	181	...
93 Shelburne	....	36	37	37	56	45	.....	50	...	.....	51	...
94 Simcoe	4	101	101	101	141	100	5	65	...	6	95	...
95 Smithville	....	42	44	42	57	42	.....	46	...	.....	46	...
96 Stirling	....	79	79	79	95	46	3	60	...	.....	60	...
97 Streetsville	....	33	33	33	40	18	.....	36	...	.....	36	...
98 Sudbury	....	140	140	140	168	111	4	125	...	.....	124	...
99 Sydenham	5	89	89	89	123	82	.....	114	...	1	118	...
100 Thorold	....	67	67	67	73	67	.....	73	...	.....	66	...
101 Tillsonburg	....	86	86	86	124	74	3	93	...	.....	91	...
Toronto—												
102 " Commerce	....	874	.....	947	731	.....	.....	986	...	.....	.....	...
103 " Davenport	....	174	98	174	205	107	.....	205	...	62	197	5
104 " North	3	230	230	230	337	190	11	334	3	100	320	3
105 Trenton	....	94	94	94	150	89	3	117	...	.....	126	...
106 Tweed	4	46	46	46	73	46	.....	63	...	.....	58	...
107 Uxbridge	....	107	107	107	146	81	7	132	...	3	135	...
108 Vienna	....	21	21	21	29	16	.....	27	...	.....	27	...
109 Walkerton	....	80	55	80	104	49	10	48	...	3	49	...
110 Wallaceburg	....	108	108	108	139	73	3	105	...	.....	118	...
111 Wardsville	....	25	25	25	35	25	.....	13	...	.....	20	...
112 Waterdown	....	41	41	41	55	36	.....	54	...	.....	52	...

HIGH SCHOOLS (Continued)

AND IN THE VARIOUS SUBJECTS, ETC. (Continued)

	Number of Pupils in the Various Subjects—Continued											Special Courses				
	Zoology	Botany	Chemistry	Physics	Mineralogy	Writing	Bookkeeping	Stenography	Typewriting	Art	Physical Culture	Commercial	Agriculture	Manual Training	Household Science	Art (Middle School)
58	47	47	27	27		47				47	54					
59	79	79	68	111	3	74				74	114					
60	58	58	93	99		85	72	22	22	57	122	22				
61	86	86	54	122		64				85	124					
62	77	77	56	99		77				77	100					
63	68	68	60	96		68				68	99					2
64	32	32	31	45		32				32	46					
65	70	70	59	94		70				76	95					6
66	60	60	51	79		28				60	79					
67	15	15	5	20		8				15	20					
68	86	86	74	157	2	120	69	36	8	52	190	36				
69	24	24	24	24			5	3	5	8	39					
70	72	72	56	97		86	44	44	44	58	143	44	50		58	
71	53	52	65	84		65				65	83					
72	42	42	79	117		56	20	17	20	51	130		41			
73			14	14		38				38	52					
74	93	93	141	141	1	71	64	14	20	60	154	13				1
75	134	134	102	221	3	121	81	81	81	127	252	81				
76	94	94	22	120		65	20	20	20	94	118					
77	77	77	56	107		77				77	107					
78	90	90	60	130		107				85	128					
79	82	82	92	138		85	42	25	25	25	169	25				
80	54	54	23	59		54	54	5	5	54	59	5				
81	99	99	88	140		99				99	143					
82	32	32	45	45		37				37	45					
83	42	42	40	58		42				42	56					
84	54	54	40	70		54			1	54	70					
85							45	45	45	28	137	45	42			
86	53	53	30	85		53				52	90		8		27	
87	15	15	16	25		15				15	25					
88	95	95	64	108	7	51				82	115					
89		67	42	42		45				60	87					
90	114	114	59	137	1	109	46			114	135					5
91	15	15	24	24		15				15	24					
92	97	98	177	147	3	175				66	334	57		101	147	17
93	30	30	43	56		12				31	59					
94	103	103	61	160	2	101	55			106	167					
95	42	42	36	57		44				40	57					
96	79	79	43	95		79				79	95					
97	33	33	18	40		33				27	40					
98	79	79	32	32		60	60	60	60	68	175					
99	94	94	86	123	4	89				89	128					
100	51	51	73	73		57	14			57	73					
101	89	89	74	73		86	75			86	124					
102	874	874	68	942		1,031	1,049	1,049	470	63	1,049	1,049				10
103	98	98	31	194		98				98	205					
104	187	187	164	312		147				177	337					
105	94	94	89	148		94				42	150					7
106	50	50	31	73	4	27				46	77					
107	107	107	74	146		65				114	149					7
108	21	21	16	29						21	29					
109	80	80	14	103		69	24	22	5	53	106	2				
110	105	105	28	28		108	8	3	3	106	139					
111	25	25	25	35		25				25	35					
112	41	41	36	54		19				42	55					

COLLEGIATE INSTITUTES

III. TABLE N—ATTENDANCE, PUPILS IN THE SCHOOLS,

High Schools	Pupils					Number of Pupils in—				No. of Pupil from—		
	Total number of pupils on the roll for the year	Number of pupils admitted for the first time to a secondary school	Boys on the roll for the year	Girls on the roll or the year	Average daily Attendance	Lower School		Middle School	Upper School	Municipalities forming High School District	Municipalities within the County or Territorial District	Other Counties or Districts
						F. I	F. II					
113 Waterford	69	29	28	41	58	35	20	14	...	19	45	5
114 Watford	80	27	34	46	68	29	23	25	3	33	42	5
115 Welland	247	84	123	124	204	97	84	50	16	116	127	4
116 Weston	219	88	101	118	189	104	48	60	7	83	122	14
117 Whitby	132	53	59	73	109	66	33	31	2	70	59	3
118 Wiarton	76	14	33	43	59	17	27	27	5	43	24	9
119 Williamstown	80	21	32	48	72	25	38	13	4	79	1	.....
120 Winchester	132	32	54	78	111	44	50	31	7	61	63	8
121 Wingham	121	47	52	69	111	47	30	34	10	50	60	11
1 Totals, High Schools	14,707	5,567	6,102	8,605	12,350	6,214	4,437	3,514	542	8,822	5,119	766
2 Totals, Collegiate Institutes	19,421	7,099	9,119	10,302	16,602	7,994	5,521	4,957	949	15,223	3,622	576
3 Grand Totals, 1920-1921	34,128	12,666	15,221	18,907	28,952	14,208	9,958	8,471	1,491	24,045	8,741	1,342
4 Grand Totals, 1919-1920	33,036	11,655	14,681	18,355	26,816	13,493	9,851	8,170	1,522	23,242	8,526	1,268
5 Increases	1,092	1,011	540	552	2,136	715	107	301	.....	803	215	74
6 Decreases	.....	.....	.....	.....	.....	.....	.....	.....	31	.....	.....	.....
7 Percentages	.....	37.11	44.59	55.40	84.83	41.63	29.17	24.82	4.37	70.45	25.61	3.93

*3rd and 4th years

AND HIGH SCHOOLS (Continued)

AND IN THE VARIOUS SUBJECTS, ETC. (Continued)

Number of Pupils from Families whose Head is occupied as below								Number of Pupils in the Various Subjects—						
	Commerce	Agriculture	Law, Medicine Dentistry or the Church	Teaching	The Trades	Labouring occupation	Other occupations	Without occupation	English Grammar	English Composition and Rhetoric	English Literature	Canadian History	British History	Ancient History	Mediaeval History
113	4	50	3	....	1	7	3	1	55	69	69	69	34	14	....
114	12	43	6	....	12	5	2	.....	52	78	78	77	48	25	....
115	74	75	12	3	77	5	.....	1	181	232	232	221	221	47	4
116	49	54	8	2	52	7	29	18	148	219	219	137	81	60	1
117	21	49	16	....	10	16	12	8	99	129	129	96	63	30	....
118	15	26	3	....	3	9	11	9	44	73	72	70	70	26	2
119	6	59	3	....	5	3	2	2	53	80	80	53	76	13	....
120	24	70	7	2	17	.....	9	3	94	132	132	94	125	31	....
121	19	60	4	....	21	5	4	8	77	115	115	111	111	34	4
1	2,710	5,320	707	157	2,818	1,270	1,244	481	10,149	14,308	14,431	12,094	9,584	3,398	367
2	5,408	3,263	1,004	372	4,418	1,543	2,612	801	12,709	18,952	18,974	14,200	12,288	4,349	386
3	8,118	8,583	1,711	529	7,236	2,813	3,856	1,282	22,858	33,260	33,405	26,294	21,872	7,747	750
4	7,717	8,688	1,569	479	6,812	2,506	3,890	1,375	21,728	32,210	32,302	26,124	22,374	7,593	668
5	401	.....	142	50	424	307	.....	.....	1,130	1,050	1,103	170	.....	154	82
6	.....	105	.....	....	.....	.....	34	93	.....	.....	.....	.....	502	.....	....
7	23.78	25.15	5.01	1.55	21.20	8.24	11.30	3.75	66.97	97.45	97.88	77.04	64.08	22.69	2.19

COLLEGIATE INSTITUTES

III. TABLE N—ATTENDANCE, PUPILS IN THE SCHOOLS,

High Schools	Number of Pupils in the Various Subjects—Continued											
	Modern History	Geography	Reading	Arithmetic and Mensuration	Algebra	Geometry	Trigonometery	French	Spanish	German	Latin	Greek
113 Waterford	....	55	55	54	55	34	.....	63	...	.....	59	...
114 Watford	1	52	52	52	78	49	1	64	...	.....	67	...
115 Welland	4	174	174	174	211	211	11	203	...	3	162	...
116 Weston	1	152	104	152	219	115	7	201	...	4	199	...
117 Whitby	1	99	99	99	111	59	1	130	...	.....	81	...
118 Wiarton	....	45	44	44	74	57	3	49	...	.....	54	...
119 Williamstown	....	53	53	58	80	55	4	74	...	.....	76	...
120 Winchester	7	94	94	94	132	88	7	98	...	.....	94	2
121 Wingham	4	77	77	77	116	70	6	109	...	.....	110	1
1 Totals, High Schools	175	10,572	9,226	10,580	13,619	7,975	377	11,959	17	367	10,688	63
2 Totals, Collegiate Institutes	288	12,879	10,560	12,787	18,043	10,486	726	15,997	131	1,428	14,895	213
3 Grand Totals, 1920-1921	463	23,451	19,786	23,367	31,662	18,461	1,103	27,956	148	1,795	25,583	276
4 Grand Totals, 1919-1920	521	22,789	19,818	22,988	30,785	18,426	1,057	26,313	124	1,703	24,420	347
5 Increases	....	662	.....	379	877	35	46	1,643	24	92	1,163	...
6 Decreases	58	.....	32	.....	.....	.....	.....	.....	...	.....	.....	71
7 Percentages	1.35	68.71	57.97	68.46	92.77	54.09	3.23	81.91	.43	5.25	74.96	.80

AND HIGH SCHOOLS (Continued)

AND IN THE VARIOUS SUBJECTS, ETC. (Concluded)

	Number of Pupils in the Various Subjects—Continued											Special Courses				
	Zoology	Botany	Chemistry	Physics	Mineralogy	Writing	Bookkeeping	Stenography	Typewriting	Art	Physical Culture	Commercial	Agriculture	Manual Training	Household Science	Art (Middle School)
113	52	52	34	69	....	55	.....	.....	.....	50	69	.....	.....	.....	.....	....
114	53	53	49	77	1	52	.....	.....	.....	51	79	.....	.....	.....	.....	....
115	153	153	120	203	4	174	46	32	32	156	247	32	.....	.....	.....	7
116	153	153	98	218	....	104	100	.....	48	152	214	.....	.....	.....	.....	....
117	54	54	29	30	1	71	19	19	19	33	131	19	41	.....	.....	....
118	46	46	57	74	2	44	.....	.....	.....	44	76	.....	.....	.....	.....	....
119	53	53	52	52	....	53	.....	.....	.....	53	79	.....	44	.....	.....	....
120	94	94	81	129	....	94	.....	.....	.....	94	129	.....	101	.....	.....	....
121	80	80	64	111	3	47	.....	.....	.....	71	121	.....	.....	.....	.....	....
1	8,889	9,037	6,974	11,998	263	9,198	2,515	1,725	1,211	8,285	14,450	1,653	932	101	301	67
2	6,270	6,493	7,204	13,303	118	8,194	3,697	2,581	2,239	7,154	18,777	2,574	574	2,666	3,277	352
3	15,159	15,530	14,178	25,301	381	17,392	6,212	4,306	3,450	15,439	33,227	4,227	1,506	2,767	3,578	419
4	15,984	16,115	14,698	25,452	307	17,147	6,714	4,239	3,444	15,122	32,568	3,965	1,405	2,439	3,488	503
5	.....	.....	.....	.....	74	245	.....	67	6	317	659	262	101	328	90	....
6	825	585	520	151	....	.....	502	.....	.....	.....	.....	.....	.....	.....	.....	84
7	44.41	45.50	41.54	74.13	1.11	50.96	18.20	12.61	10.10	45.23	97.35	12.38	4.41	8.10	10.48	1.22

COLLEGIATE INSTITUTES

IV. TABLE O—ATTENDANCE OF PUPILS BY

Collegiate Institutes	Lower School, Form I																	
	Boys												Girls					
	10 years	11 years	12 years	13 years	14 years	15 years	16 years	17 years	18 years	19 years	20 years	21 and over	11 years	12 years	13 years	14 years	15 years	16 years
1 Barrie				1	6	13	15	4	4						5	14	17	16
2 Brantford			5	29	52	33	12	7					1	7	49	44	22	11
3 Brockville			1	2	17	17	10	2						1	8	18	16	20
4 Chatham			1	9	16	16	12	10						1	8	27	33	10
5 Clinton				3	10	9	5								6	12	11	5
6 Cobourg				1	9	4	6		1					1	5	10	11	6
7 Collingwood				4	5	7	10	1						1	5	13	14	17
8 Fort William		2	9	10	33	24	10	1						3	18	30	28	10
9 Galt				13	28	28	11	1	2		1			3	11	27	36	11
10 Goderich			1	4	6	6	5	1	1					3	5	10	10	7
11 Guelph		1		4	27	33	14	7	2	1		1		2	12	28	22	16
12 Hamilton			4	36	79	39	19	6	2					7	31	69	46	17
13 Ingersoll				3	18	12	5	3	1						3	13	20	7
14 Kingston			1	14	38	22	20	7	2	2					7	22	35	20
15 Kitchener-Waterloo			4	15	24	13	4	3						4	21	25	16	6
16 Lindsay				6	17	24	11	7	1	1					3	12	19	14
17 London			6	29	79	77	32	12	3	1				9	32	92	77	40
18 Morrisburg	1	3	4	3	6	4								2	7	2	8	3
19 Napanee		1		2	3	7	6	1	1					1	4	13	11	14
20 Niagara Falls			2	5	4	8	3				1				4	15	27	8
21 North Bay				3	11	12	11	5						2	13	21	22	12
22 Orillia			1	2	15	18	10	2							11	16	13	15
23 Ottawa			7	36	72	92	64	13	4	1				1	27	69	76	58
24 Owen Sound				7	19	29	17	4	1					1	6	18	24	21
25 Perth				1	4	15	4	5	1	2				1	3	6	14	4
26 Peterborough			1	12	13	30	14	5	1	1				1	21	22	30	15
27 Picton		1	3	4	18	17	13	2						2	3	15	14	6
28 Port Arthur			2	5	5	12	9	3		1			1	1	19	11	24	20
29 Renfrew		2	4	10	14	13	10	4	2	1			1	3	16	25	23	12
30 St. Catharines			5	13	45	42	20	10	2					4	14	41	38	18
31 St. Mary's				8	15	12	6		1					3	7	11	19	4
32 St. Thomas			3	23	34	28	11	2						2	21	50	34	17
33 Sarnia				8	21	23	13	3	3						18	37	35	24
34 Seaforth				1	13	7	8	2							5	12	10	4
35 Smith's Falls				5	6	13	7	5	3						10	18	17	11
36 Stratford			2	15	37	21	7								16	44	30	4
37 Strathroy			1	4	8	9	4	2	1	2					4	9	7	4
Toronto—																		
38 Harbord			8	25	53	31	10	2						4	20	43	24	10
39 Humberside		1	6	26	43	31	15	4						8	24	32	41	26
40 Jarvis				17	34	40	11	6		1		1		3	13	31	12	18
41 Malvern			1	12	25	25	18	5	1					1	11	23	39	16
42 Oakwood			3	23	45	33	25	5	3			1		3	18	40	45	24
43 Parkdale			1	13	36	20	24	3						3	18	35	38	19
44 Riverdale			2	14	52	51	32	3						1	24	32	39	23
45 Vankleek Hill			1	5	3	8	4	1						5	6	15	4	11
46 Windsor			11	30	54	47	16	3	1	1			1	7	43	66	50	9
47 Woodstock				9	29	14	19	3				1		1	15	40	26	9

AND HIGH SCHOOLS (Continued)

AGE, SEX AND GRADE

						Lower School, Form II																				
						Boys										Girls										
	17 years	18 years	19 years	20 years	21 and over	12 years	13 years	14 years	15 years	16 years	17 years	18 years	19 years	20 years	21 and over	12 years	13 years	14 years	15 years	16 years	17 years	18 years	19 years	20 years	21 and over
1	5	..	..	..	..	..	..	..	4	12	7	3	1	..	..	..	..	2	5	16	16	13	1	..	..
2	4	..	..	..	..	..	4	21	28	16	3	2	..	..	1	3	7	28	28	11	6	2	..	..	..
3	3	2	..	..	..	..	2	5	12	15	9	4	1	..	..	..	2	4	13	20	18	9	..	1	1
4	7	1	1	..	..	..	1	7	10	10	7	6	2	..	..	..	1	13	8	14	13	13	5	..	..
5	..	..	..	..	..	..	..	3	7	7	2	1	..	..	..	..	2	7	12	12	4	1	..	..	..
6	4	..	..	..	..	..	..	..	7	13	3	1	..	..	..	..	..	..	7	14	4	4	3	..	..
7	6	..	..	..	..	..	..	4	4	8	4	2	1	..	..	..	2	4	12	13	6	3	3	..	..
8	1	1	..	..	..	..	1	4	9	9	6	..	..	..	..	..	2	10	16	16	8	4	..	..	..
9	1	..	1	..	..	..	..	6	15	13	8	6	..	..	..	..	..	6	16	28	18	3	1	1	..
10	3	..	..	..	..	1	1	3	2	5	2	..	..	..	..	..	1	5	10	10	2	2	1	..	..
11	6	3	1	..	..	..	..	3	17	11	6	1	..	1	..	..	..	12	23	10	7	3	..	..	..
12	7	1	1	..	..	..	1	4	18	36	28	10	1	2	..	..	1	4	21	49	30	7	..	..	1
13	5	..	..	..	..	..	..	3	10	7	2	1	..	..	..	..	..	1	11	14	5	..	..	..	..
14	9	2	2	1	..	..	..	9	22	24	15	4	2	1	..	..	1	10	20	25	16	5	3	..	..
15	2	..	..	..	..	..	1	6	22	4	..	..	..	..	..	..	..	16	17	12	1	..	1	..	..
16	5	..	..	..	..	..	1	9	13	11	9	1	2	1	2	..	..	1	13	17	8	5	1	..	..
17	11	2	..	..	..	..	9	22	53	54	22	10	1	..	1	..	3	27	65	54	38	13	1	..	..
18	..	..	..	..	..	..	2	1	3	2	2	2	..	..	..	2	4	8	5	5	5	2	..	..	..
19	6	1	2	..	..	..	1	1	1	5	4	..	1	..	..	..	1	2	18	9	7	4	2	..	1
20	3	1	..	..	..	..	..	2	12	17	2	1	1	1	..	..	1	5	12	11	4	3	..	..	..
21	3	..	..	..	..	..	..	1	9	9	5	4	..	..	..	..	1	6	13	12	12	8	1	1	..
22	7	5	..	..	..	..	..	3	10	8	4	1	1	..	..	..	2	5	16	13	9	5	1	3	..
23	16	1	..	..	..	..	6	25	55	52	38	15	5	..	..	..	4	14	50	76	29	16	3	..	..
24	8	..	..	..	..	..	..	..	1	10	2	2	..	..	..	..	4	4	19	24	18	5	..	..	..
25	7	..	..	..	..	..	..	1	1	6	4	1	1	..	..	..	..	2	6	13	8	3	..	..	..
26	10	1	..	..	..	..	1	5	19	14	11	3	1	..	..	..	2	5	16	27	15	10	..	..	..
27	5	2	..	..	..	..	..	1	2	8	2	2	..	..	..	..	..	1	10	19	9	7	3	1	..
28	8	3	..	..	..	..	1	3	4	6	4	4	..	..	..	..	2	7	11	16	13	5	2	..	..
29	6	3	..	..	..	..	..	2	11	23	11	3	..	..	1	..	..	2	9	22	10	5	..	..	1
30	5	2	..	..	..	..	..	9	18	22	16	5	1	..	..	..	..	6	33	28	8	5	5	..	1
31	3	.	..	..	..	..	..	3	6	5	4	..	..	..	..	..	1	7	8	7	8	2	..	..	..
32	4	..	..	..	..	..	2	14	38	31	15	3	..	..	..	..	5	10	37	25	16	7	..	..	..
33	7	3	..	..	..	..	2	2	9	17	13	8	2	..	..	..	2	15	23	27	13	9	5	1	1
34	1	..	..	..	..	..	1	6	8	3	1	..	..	..	..	..	1	16	8	8	2	..	..	..	..
35	4	1	1	..	..	..	2	3	7	7	6	2	..	..	..	..	..	12	7	21	18	6	2	..	..
36	1	..	..	..	..	..	..	4	17	13	7	..	..	..	..	..	2	16	16	15	5	..	..	1	..
37	5	..	3	..	..	..	..	..	4	5	3	..	..	..	..	..	..	3	9	3	2	3	1	..	..
38	..	..	..	..	..	..	5	15	33	19	18	4	..	..	..	..	4	15	40	29	13	3	..	..	..
39	6	..	..	..	..	..	..	11	29	17	10	..	..	..	..	..	1	12	22	29	14	1	..	..	..
40	2	..	..	..	..	1	1	13	24	37	16	6	2	1	1	..	..	4	22	22	5	5	..	..	..
41	6	1	1	..	..	..	1	4	13	14	5	2	..	..	..	..	..	3	7	16	8	3	..	..	..
42	7	3	..	..	..	..	5	19	31	35	22	11	1	..	..	..	4	17	35	34	25	7	..	..	..
43	3	1	..	..	..	..	1	12	26	32	11	2	..	..	..	..	2	7	23	41	13	3	..	..	..
44	5	..	..	..	..	..	..	8	14	27	8	1	..	..	..	..	..	9	28	19	7	4	..	..	..
45	1	..	..	..	..	..	1	3	3	3	1	1	..	..	..	..	1	5	7	13	8	3	1	..	..
46	6	..	..	..	..	1	4	16	21	20	5	4	2	..	..	..	6	36	35	33	11	9	1	..	..
47	4	1	..	..	..	..	2	7	10	5	5	3	2	1	..	1	1	10	26	27	9	4	2	..	..

COLLEGIATE INSTITUTES

IV. TABLE O—ATTENDANCE OF PUPILS BY

Collegiate Institutes	Middle School														
	Boys									Girls					
	13 years	14 years	15 years	16 years	17 years	18 years	19 years	20 years	21 and over	13 years	14 years	15 years	16 years	17 years	18 years
1 Barrie	....	....	....	2	3	8	4	2	1	....	....	....	6	9	12
2 Brantford	3	8	11	23	17	6	2	....	1	1	1	20	28	25	9
3 Brockville	....	....	....	5	7	4	5	3	1	....	....	4	7	6	6
4 Chatham	....	2	1	2	5	7	5	....	....	....	1	6	3	12	4
5 Clinton	....	....	1	6	2	2	1	....	....	....	....	4	10	12	5
6 Cobourg	....	....	1	4	1	4	2	....	....	....	....	1	6	5	8
7 Collingwood	....	....	....	2	8	4	4	....	....	....	1	5	8	4	7
8 Fort William	....	3	4	12	14	4	2	1	....	....	2	8	8	17	11
9 Galt	....	....	12	14	15	5	2	3	1	....	4	5	11	6	8
10 Goderich	....	1	1	2	2	2	1	1	....	1	3	4	6	6	8
11 Guelph	....	....	6	10	17	8	5	6	1	....	....	4	12	21	11
12 Hamilton	....	....	....	18	33	33	15	3	2	....	1	4	16	46	32
13 Ingersoll	....	1	....	4	5	8	7	3	....	1	1	7	7	13	2
14 Kingston	....	1	2	23	42	32	16	7	2	....	1	6	31	29	30
15 Kitchener-Waterloo	....	2	13	9	7	4	....	2	1	....	1	9	15	9	3
16 Lindsay	....	2	....	7	12	6	7	1	5	....	....	2	8	9	13
17 London	....	3	10	27	28	14	14	6	7	....	3	14	26	43	22
18 Morrisburg	1	2	1	4	2	2	3	....	....	....	1	3	4	3	3
19 Napanee	....	....	2	3	1	8	1	1	1	....	....	4	12	7	7
20 Niagara Falls	....	1	3	9	4	12	....	3	2	....	1	4	16	15	6
21 North Bay	....	....	1	4	3	4	6	3	3	....	....	1	7	16	8
22 Orillia	....	....	5	8	17	4	2	1	....	....	....	3	11	12	13
23 Ottawa	....	2	24	50	73	49	28	6	2	....	3	18	38	50	40
24 Owen Sound	....	1	11	20	11	9	4	....	1	....	....	7	10	21	19
25 Perth	....	....	1	3	7	8	5	1	....	....	....	4	5	12	10
26 Peterborough	....	4	3	8	14	13	5	2	1	....	....	7	10	11	10
27 Picton	....	....	2	4	5	5	4	....	....	....	....	5	4	7	12
28 Port Arthur	....	....	1	2	2	3	1	2	....	....	....	1	2	10	7
29 Renfrew	....	3	3	6	5	1	1	....	....	....	....	2	9	5	2
30 St. Catharines	....	....	3	15	7	6	3	1	2	....	1	5	10	10	4
31 St. Mary's	....	1	2	2	4	3	1	1	....	....	....	5	9	11	4
32 St. Thomas	....	4	6	16	25	12	....	....	....	....	6	12	11	11	8
33 Sarnia	1	....	3	17	16	15	6	1	2	....	....	16	15	9	11
34 Seaforth	....	1	2	15	5	2	....	....	....	....	3	16	12	5	2
35 Smith's Falls	....	....	....	2	9	5	4	5	....	....	1	1	10	10	11
36 Stratford	....	2	9	9	15	5	....	1	....	....	2	5	18	13	4
37 Strathroy	....	1	1	6	5	9	2	....	1	....	....	....	6	4	9
Toronto—															
38 Harbord	....	....	15	42	46	27	7	1	....	1	1	12	30	29	11
39 Humberside	....	5	15	28	29	12	2	2	1	....	1	7	19	20	14
40 Jarvis	....	3	13	35	23	21	7	....	1	....	5	8	22	25	7
41 Malvern	....	....	5	6	11	13	5	2	....	....	1	3	4	14	11
42 Oakwood	....	1	13	42	35	31	6	5	2	....	3	12	46	42	29
43 Parkdale	....	2	4	30	38	20	6	....	....	....	....	8	33	23	20
44 Riverdale	....	1	10	23	27	17	14	7	1	1	1	7	22	23	15
45 Vankleek Hill	....	....	3	2	....	....	....	....	....	....	....	4	4	5	5
46 Windsor	....	1	10	21	31	6	4	1	....	....	1	9	16	3	4
47 Woodstock	....	2	4	12	16	5	3	4	....	....	1	3	15	21	14

AND HIGH SCHOOLS (Continued)

AGE, SEX AND GRADE (Continued)

	Upper School																					Total No. of Boys	Total No. of Girls	Total No. enrolled
	Boys											Girls												
	19 years	20 years	21 and over	14 years	15 years	16 years	17 years	18 years	19 years	20 years	21 and over	15 years	16 years	17 years	18 years	19 years	20 years	21 and over						
1	6	6	..	..	..	..	1	4	2	2	5	..	..	2	2	5	1	..				104	159	263
2	1	....	..	..	1	2	4	5	2	1	..	..	2	7	4	2	..	..				299	323	622
3	2	1	..	..	..	..	2	....	....	..	..	..	2	6	5	1	..	..				124	176	300
4	2	1	..	..	2	1	3	3	1	..	..	2	2	2	5	3	..	..				139	198	337
5	3	....	..	..	..	1	....	1	3	2	..	..	1	2	1	2	1	..				66	113	179
6	3	....	..	..	..	..	....	2	1	1	1	..	..	....	4	....	..	..				62	96	158
7	2	....	..	..	..	2	2	4	4	2	1	..	3	2	3	4	..	..				83	138	221
8	2	....	..	..	..	1	4	....	....	..	..	..	1	2	....	....	..	..				163	198	361
9	1	1	..	..	..	3	4	3	3	2	1	..	..	4	2	1	..	..				200	206	406
10	4	1	..	..	..	2	....	2	2	2	..	..	1	2	....	2	1	..				56	108	164
11	3	....	..	..	..	1	5	5	5	1	1	..	2	2	1	4	3	..				200	208	408
12	16	7	1	..	1	..	4	9	4	3	1	..	2	....	6	9	4	2				411	438	849
13	2	....	..	..	..	..	1	1	2	1	..	..	..	....	1	1	..	..				98	114	212
14	12	5	1	..	..	1	1	1	1	2	1	..	..	1	....	1	1	..				315	296	611
15	1	....	..	..	..	3	5	6	2	1	1	..	..	2	2	....	..	..				152	163	315
16	5	....	..	..	..	2	2	8	6	3	..	..	1	....	1	3	..	..				177	140	317
17	13	3	..	..	3	4	7	5	6	2	..	..	3	9	3	1	1	..				547	605	1,152
18	1	....	2	..	..	..	....	1	1	1	..	..	2	3	1	1	1	1				51	79	130
19	....	....	1	..	..	2	1	1	....	1	..	..	1	4	1	1	..	..				56	134	190
20	2	2	1	1	2	1	3	4	....	..	..	..	1	1	3	1	..	..				104	147	251
21	8	1	1	..	..	..	1	1	2	1	..	..	..	....	1	1	..	..				99	171	270
22	6	8	1	..	..	1	1	4	1	2	..	..	1	1	1	....	1	..				121	179	300
23	8	6	2	..	..	3	2	4	3	3	..	..	..	11	6	2	1	1				734	626	1,360
24	4	2	..	..	..	1	3	1	2	..	2	..	2	5	2	....	..	..				158	224	382
25	6	....	..	..	..	1	1	2	2	..	..	..	1	....	3	....	..	..				77	108	185
26	7	2	..	..	..	2	2	5	....	3	..	1	1	....	3	....	..	..				193	227	420
27	6	3	..	..	..	..	3	1	....	..	..	..	..	....	3	1	..	1				97	139	236
28	3	....	1	..	..	..	....	....	1	..	..	..	..	....	....	1	..	..				71	168	239
29	2	1	..	..	..	..	....	2	2	..	..	..	..	1	3	1	..	..				134	164	298
30	1	....	1	..	..	1	2	6	....	..	..	..	2	4	4	1	..	..				254	251	505
31	1	....	1	..	..	..	1	3	1	3	..	..	..	3	....	1	..	..				82	115	197
32	....	....	..	..	..	4	5	4	1	..	..	..	2	8	4	2	1	..				281	293	574
33	4	....	..	..	..	..	1	2	3	1	1	..	..	3	1	....	..	..				193	269	462
34	....	....	..	..	1	2	2	8	3	2	2	4	2	5	....	....	..	1				95	117	212
35	7	2	..	..	..	..	....	3	....	..	..	..	..	3	3	4	..	..				94	180	274
36	....	....	..	..	..	..	7	6	3	..	..	3	3	7	4	....	..	..				180	209	389
37	4	1	4	..	..	..	....	5	4	..	2	..	1	3	2	2	..	1				79	90	169
38	7	1	3	..	..	1	3	5	7	1	1	1	..	4	4	2	1	..				379	312	691
39	5	1	..	..	..	..	6	6	4	1	1	1	1	1	5	1	..	..				305	292	597
40	7	1	1	..	1	..	7	10	4	..	..	..	..	3	3	....	..	..				337	219	556
41	5	1	..	..	1	1	1	1	....	1	..	..	..	2	1	2	1	1				172	181	353
42	14	2	..	..	1	..	4	8	4	2	..	..	1	9	11	3	..	..				416	434	850
43	12	2	..	..	..	2	5	6	4	1	..	..	1	2	3	4	..	..				299	314	613
44	2	....	..	..	..	..	2	4	5	2	1	..	..	3	1	....	..	..				326	266	592
45	2	2	..	..	..	..	1	1	....	..	..	..	..	....	4	....	..	..				41	106	147
46	4	....	..	..	2	..	4	4	....	..	..	..	1	1	1	1	..	..				320	354	674
47	6	2	..	..	..	..	4	8	6	1	..	..	..	2	8	6	1	..				175	255	430

COLLEGIATE INSTITUTES AND

IV. TABLE O—ATTENDANCE OF PUPILS BY

High Schools	Lower School—Form I																	
	Boys												Girls					
	10 years	11 years	12 years	13 years	14 years	15 years	16 years	17 years	18 years	19 years	20 years	21 and over	11 years	12 years	13 years	14 years	15 years	16 years
1 Alexandria					7	7	11	2	1						3	12	9	11
2 Alliston				1	1	5	3		1			1			2	5	4	5
3 Almonte				1	6	8	2		1						2	4	9	5
4 Amherstburg				2	4	1								1		2	4	3
5 Arnprior					3	31	5	2							1	12	30	6
6 Arthur			2	1	5	2		1							10	8	5	1
7 Athens			2	5	8	9	2	2					1	3	4	10	5	4
8 Aurora				3	8	6	3	2							5	7	5	3
9 Avonmore					3	4	3	2					1			7	6	3
10 Aylmer				1	7	5	2							1	5	10	9	4
11 Beamsville			1	7	6	7	2	1						3	1	7	4	1
12 Belleville			1	9	17	12	6	2						4	13	24	25	13
13 Bowmanville				2	8	7	2	1						1	5	8	8	9
14 Bracebridge			1		6	6	5	1							2	10	9	4
15 Bradford			1	6	5		1							2	1	4	2	1
16 Brampton					4	12	2	1								6	24	11
17 Brighton				4	2	5	4								5	6	6	5
18 Burlington			2	5	6	3	3							2	1	6	4	2
19 Caledonia			1	1	4	5	3							2	2	8	12	4
20 Campbellford			1	3	3	5	3	3							4	4	9	4
21 Carleton Place			1	1	9	9	6	3	1	1						5	11	10
22 Cayuga			2	2	5	4	2							3	5	6	4	1
23 Chatsworth					1	1	1	1					1	1	4	2	2	
24 Chesley				1	8	3	6								1	2	6	3
25 Chesterville		1	4	4	6	8	1	1						1	5	5	3	1
26 Colborne				1	5	1	2	1							1	5	6	2
27 Cornwall			1	4	11	19	6	4	4					1	8	14	17	14
28 Deseronto			2		7	4	1								1	1	2	1
29 Dundalk			1	2	5	2	1								7	5	1	3
30 Dundas				4	12	8	8	2	1						7	9	12	6
31 Dunnville				6	8	4	1	2							6	7	9	2
32 Durham			1	4	5	1	3	4						2	6	12	11	4
33 Dutton			3	1	2	9	4							1	4	4	6	5
34 Elora					2	1	3									6		1
35 Essex					1	4	7	6	2						2	8	9	9
36 Exeter			3	5	5	1	1						1	1	9	7	2	1
37 Fergus			1	5	7	2	3	1							5	7	4	1
38 Flesherton				1	2	5									1	2	3	
39 Forest				1	5	9	3	4							1	3	8	3
40 Fort Frances				2	2	4	1	1							4	5	8	11
41 Gananoque				5	4	5	6	1							2	7	5	5
42 Georgetown				3	3	7	6	1							6	11	6	6
43 Glencoe			2	2	2								1	1	2	9	6	1
44 Gravenhurst				2	1		2								1		6	
45 Grimsby			2	2	6	9	4	1							3	7	10	1
46 Hagersville				3	3	4	4	1							4	6	10	4
47 Haileybury				2	11	9	16	2	1						4	6	8	6
48 Harriston			2	3	3	5	7								3	8	4	3
49 Hawkesbury			1	2	4	4	2						1	2	8	7	2	1
50 Iroquois			3	5	5	4	1							4	10	11	5	
51 Kemptville		1	2	4	5	6	2	3						3	5	10	3	6
52 Kenora			1	3	5	9	1	1						1	3	12	9	6
53 Kincardine				8	12	8	2								16	6	2	2
54 Leamington				5	7	10	10	4	1						1	6	21	13
55 Listowel		1	3	11	14	5	3	1							8	7	7	2
56 Lucan				1	6	8	1							1	1	3	3	4
57 Madoc					3	5		1	1						4	6	8	7

HIGH SCHOOLS (Continued)

AGE, SEX AND GRADE (Continued)

	Lower School—Form II																											
	Boys														Girls													
	17 years	18 years	19 years	20 years	21 and over	12 years	13 years	14 years	15 years	16 years	17 years	18 years	19 years	20 years	21 and over	12 years	13 years	14 years	15 years	16 years	17 years	18 years	19 years	20 years	21 and over
1	5	1							1	2	3						2	2	5	4	9	2			
2	4	1							2	2	2	2						1	4	9	5	2			
3	2	2								1	2	2		1			1	1		6	2	1			
4	1							1	2	1		1						3	2	4	2				
5	2	1						1	3	7	4	2					2	4	14	13	4				
6	1							2	3	2	4		1					1	5	3	2				
7		1					1	4	7	6	3	1						9	9	6	3				
8	1						2	1		1	3	1						4	11	6					
9								1	2		1								5	1	3	3			
10		1						3	6	6		1						3	6	6	3	1			
11	1		1				3	1	5	4							1	2	4	8	1				
12	8	1						11	10	11	12	1						7	17	20	12	1			
13	5							3	7	5	4							2	6	6	7	3	1		
14	1							1	5	4	1	1			2			4	1	1	8	1	4		
15								1	7	3							1	4	3	2	1	2			
16	1								1	9	4	1							3	22	4	2			
17							3	4	2	1							1		9	4	1	2		1	
18								1	2	3							1	3	7	2	1				
19	1	1						2	1	1	2	2	1					3	13	3	7	1	1		
20	1	1						6	7	2	8	3						1	12	15	10	2	1	1	
21	5	2						2	1	4	2	1			1			1	9	7	5	2			
22							2	1		3	1						4	2	5		1	1			
23	1							2		1	1							1		1					
24	5								6	6	4	3							4	7	6		1		
25	1							1	8	2							1	5	9	5	7	2			
26							1	2	2	2	1	1					1	1	1	2	1				
27	5							3	8	9	4	1						5	7	18	16	5	5		
28									1	2	2						2	3	4	2					
29								1	1		2	2						2	3	2	4				
30	2		1						3	6	5							2	9	7	4	2			
31								5	3	4							1	5	15	3	5	1			
32	2						1	3	4	4	4							1	7	9	6	2		1	
33		1							2	6	3							3	7	3	4	2			
34	1		1				1	1	3								2	5	3	3					
35	4							2	3	7	5	5	2					6	6	8	4	1			
36								2	8	2	1							3	8	3	3	3			
37							2	7	3	6	5	2					1	3	2	4	3				
38	1							1	3		1							3	6	7	2	1			
39								1	6	2	4							1		4	5	6	1		
40	4		2					1	3	3	1	1							2	5	6	5	5	1		
41	2								6	8	5	1					2	1	9	14	5	2			
42		2						2	2	4	6	1	2					1	4	8	2	1			
43	1							1	4		2	1						3	5	4	2				
44							1		2			1						1	2	2			1		
45							1	4	2	9	2	1	1				1	3	4	5	2	4			
46	2							2	3	5	1							4	4	8	3	1			
47	8	1				1		2	3	7	6	4			1			2	7	9	2	1	2		
48	1	1						3	5	3	3						2	2	1	3	2		1		
49								4	3	3	1						1	3	12	5	1				
50		1						3	4	2		1						3	5	4	5	2			
51	3	1				1		3	2		3	1			1	2	2	6	5	6	5	4			
52	1		1				1	3	3	5	3							4	7	9	5	1	1	1	
53								2	7	6							5	3	14	8	1				
54	7								6	8	10	5	1					4	12	14	8	1			1
55	1						1	2	3	3					1			3	6	5	2	1			
56							2	1	6	6	4	1						1	4	3		1			
57	5	2							3	2	1	1								7	6	4	3		

COLLEGIATE INSTITUTES

IV. TABLE O—ATTENDANCE OF PUPILS BY

High Schools	Middle School															
	Boys									Girls						
	13 years	14 years	15 years	16 years	17 years	18 years	19 years	20 years	21 and over	13 years	14 years	15 years	16 years	17 years	18 years
1 Alexandria				1	3	3		1					3	4	
2 Alliston					2	1	1					2	4	5	2
3 Almonte			3	3	2	2	2	2				1	4	5	2
4 Amherstburg			1			2	2		1			1	2	3	2
5 Arnprior			1	8	6	4	2	1			1	3	15	8	4
6 Arthur					1	1	1	1	1			3	3		3
7 Athens			1	1	6	2		4	1			3	2	11	5
8 Aurora			4	1	2	3	3	2	2		1	3	4	3	3
9 Avonmore			1	1	1						1	1	3	1	2
10 Aylmer				2	4	1						1	6	11	
11 Beamsville	1		2	2	2						1	3	3	4	3
12 Belleville		2	8	9	12	9		1	1		2	8	14	11	8
13 Bowmanville			1	2	2	2		1				2	4	7	6
14 Bracebridge			1	3	5							1	4	5	2
15 Bradford			1	3	2						1	3	1	1	1
16 Brampton			1	5	8	5	4	2	1			2	4	6	4
17 Brighton			1	1	2	1	2						2	3	5
18 Burlington		1			2	1	1		1			3	8	3	
19 Caledonia		1	1	2	1	2	2	1	1		1	4	8	7	4
20 Campbellford			3	4	1	5	2	2	2			2		5	6
21 Carleton Place			1	3	4	3	3		1				2	15	10
22 Cayuga			1	1	2						1	4	2	1	4
23 Chatsworth				2	2		2							3	1
24 Chesley				1	3	4	1	3					6	4	3
25 Chesterville		1	2	1	1	2	1					1	3	5	4
26 Colborne			1	3	2	1		2	1			1	3	4	2
27 Cornwall		1	3	8	4	3	1	1			1	3	8	9	8
28 Deseronto			4	1				1			1	2	2	2	
29 Dundalk				1	2	1	2		1		1	1	3	4	
30 Dundas				3	5	4	1	1	1				2	4	6
31 Dunnville		1	2	6	5	5					2	5	5	5	2
32 Durham			1	4	1	2	1						1		9
33 Dutton			2	2	1	3	1	1			1	2	7	3	3
34 Elora		2		1	1							3	2	2	4
35 Essex				1	5	3	2	1	1		1	2	2	5	2
36 Exeter			2	3	3	2						2	2	5	5
37 Fergus				3	4	3		1					3	7	2
38 Flesherton		2			1	1		1			1	2	1	5	
39 Forest			2	1	4	1	3	1						4	5
40 Fort Frances					1	1					1	1	4	2	1
41 Gananoque			1	4	4	4							3	4	5
42 Georgetown			1	3	5	3	5					1	3	2	6
43 Glencoe			1		2	2	1		1			1	4	6	6
44 Gravenhurst		1		1	2	1								1	1
45 Grimsby				4	7	3	3					1	6	7	7
46 Hagersville			2	4	4	2	1		1			2	3	6	2
47 Haileybury				1	3	4	2		1				5	2	3
48 Harriston		1	4	1	6	3						5	3	4	4
49 Hawkesbury			2	2	6	4	1	1				3	5	2	1
50 Iroquois			1	3	4	3	1					2	5	7	6
51 Kemptville	1	1	1	2	5	1	1		2			2	5	6	2
52 Kenora	1	1	2	1	5							2	6	6	2
53 Kincardine			1	3	2		1				2	3	3	11	7
54 Leamington			1	6	6	6	4	2	3			3	4	4	10
55 Listowel		1	2	8	3	3	2				1	5	6	3	5
56 Lucan			2	3	2	3		1					4	4	3
57 Madoc				1	5	4	3		1			2	3	3	4

AND HIGH SCHOOLS (Continued)

AGE, SEX AND GRADE (Continued)

| | Upper School | | |

COLLEGIATE INSTITUTES

IV. TABLE O—ATTENDANCE OF PUPILS BY

High Schools	Lower School—Form I																	
	Boys												Girls					
	10 years	11 years	12 years	13 years	14 years	15 years	16 years	17 years	18 years	19 years	20 years	21 and over	11 years	12 years	13 years	14 years	15 years	16 years
58 Markdale				3	4	3	1								2	5	5	4
59 Markham				5	4	2	1	1							4	8	7	2
60 Meaford			1	1	5	4	5		2						3	10	6	6
61 Midland				1	4	7	7	3	1						2	5	17	14
62 Milton				2	8	5	4	1							1	6	10	3
63 Mitchell				3	7	5	1								2	10	5	4
64 Morewood				1	1	1	1						1		2	1	2	2
65 Mount Forest			1	5	2	3	2								5	7	5	
66 Newburgh				3	3	6							4		3	6	1	1
67 Newcastle					1	2	2								1	1		1
68 Newmarket			1	3	8	17	15	7	1				1		3	8	21	8
69 Niagara				1	1	4	1	1	1							1	5	1
70 Niagara Falls S.			2	4	17	4	1	1					1		5	9	11	10
71 Norwood				1	4	4	3	1							3	7	6	
72 Oakville				5	7	13	1	2					1		5	8	5	6
73 Omemee				4	2	1	1	1					2		4	4	3	1
74 Orangeville					4	10	7	3	1				1		3	10	19	10
75 Oshawa			2	4	18	16	7	9	3	1		1		3	5	20	19	5
76 Paris			1	2	8	6	4		2						5	15	12	7
77 Parkhill				4	4	6	5	1					1		3	1	9	10
78 Parry Sound			1	1	4	5	12	7	1				1		1	2	10	11
79 Pembroke			3	5	11	6	5	2			1				3	10	6	4
80 Penetanguishene					2	4	2	2								2	8	11
81 Petrolia					2	11	10								2	12	12	6
82 Plantagenet			1	1	1	3	1						1		1	1	2	1
83 Port Dover					5	2							3		3	3	2	
84 Port Elgin			1	2	2	2	3						1		1	5	8	4
85 Port Hope					8	3	4								3	9	19	3
86 Port Perry			1	2	4	4	4	2	2						1	5	13	4
87 Port Rowan					1	1									1	1	4	
88 Prescott			1	5	5	3	4						1		4	4	16	4
89 Richmond Hill			2	4	13	2	1						4		8	1	6	4
90 Ridgetown			1	2	4	6	5					1		1		11	11	4
91 Rockland						3	1		1									1
92 Sault Ste. Marie	1	2	17	21	8	12	2	2					4	12	27	30	22	
93 Shelbourne						3	1									2	3	2
94 Simcoe		4	6	6	8	2							3	8	8	12	3	
95 Smithville		1	6	3	2							1			3	3	2	
96 Stirling		3	4	5	3	1	1						4		8	9	6	2
97 Streetsville			1	4	6		1						1		2	3	3	1
98 Sudbury			4	8	8	7	3								4	9	17	11
99 Sydenham					2	9	5	3					1		1	5	8	2
100 Thorold			1	7	5	3	1									7	9	5
101 Tillsonburg			2	8	6	1									6	13	6	8
Toronto—																		
102 Commerce		1	16	43	58	41	10	3	1	1			8	46	115	129	90	
103 Davenport		6	13	21	14	2	1					1	4	9	16	8	3	
104 North		3	12	20	16	9	2						1	11	17	29	24	
105 Trenton			2	4	9	14	2								8	13	5	
106 Tweed		2	7	1	2		1						1	3	7	2		
107 Uxbridge	1	4	5	10	9	2							2	4	15	8	4	
108 Vienna			1		3	2									1	4	2	
109 Walkerton		1	2	11	4	3								5	9	14	5	
110 Wallaceburg				7	7	6	4						2	3	9	12	13	
111 Wardsville			1	1		2	2						1		3	1	3	
112 Waterdown			3	1	4	2	1							1	4	3		
113 Waterford			2	8	5	3		1		1					2	6	6	

AND HIGH SCHOOLS (Continued)

AGE, SEX AND GRADE (Continued)

| | Lower School—Form II | | |

COLLEGIATE INSTITUTES

IV. TABLE O—ATTENDANCE OF PUPILS BY

High Schools	Middle School															
	Boys									Girls						
	13 years	14 years	15 years	16 years	17 years	18 years	19 years	20 years	21 and over	13 years	14 years	15 years	16 years	17 years	18 years
58 Markdale						2	3						1	1	
59 Markham			1	2	4	1	2					3	2	4	2
60 Meaford			1	3	6		2						3	7	6
61 Midland	1		3	2	2	4	3		1			2	5	2	4
62 Milton				5	1	1							4	7	5
63 Mitchell			1	5	3	3	2						4	5	5
64 Morewood			1			2		2	2				2	1	2
65 Mount Forest			2		3	2	2				1	1	4	4	3
66 Newburgh							1						6	5	5
67 Newcastle				1		3									1
68 Newmarket				2	5	6	3		5			2	4	7	4
69 Niagara						1					1	1		3	4
70 Niagara Falls S.		2	5	3	2	6			1			2	1		2
71 Norwood					3								2	7	2
72 Oakville			1	4	1	1	4		2		1		2	4	6
73 Omemee				2		2			1	1		1	2	3	1
74 Orangeville			1		2	10	1	2			1		2	10	6
75 Oshawa			2	9	4	4	3	2			2	7	8	3	2
76 Paris			3	2	2		1		2		1	1	5	1	
77 Parkhill				3	1	1	3	1			1	2	3	1	3
78 Parry Sound					4	3						1	4	6	4
79 Pembroke		1	8	9	8	2	4	4	1		1	7	3	4	2
80 Penetanguis'ne				2	1									1	1
81 Petrolia			3	5	7	3	1					1	8	11	3
82 Plantagenet			2	1	1	1	1								1
83 Port Dover		1	1	1	2							2	3	4	1
84 Port Elgin			1		3	1			1				1	3	2
85 Port Hope			1	3	2	1		1				1	4	5	5
86 Port Perry			1	3	4	5			1				1	3	1
87 Port Rowan			2	1	1	2						2			1
88 Prescott			1	4	3	1						2		2	4
89 Richmond Hill			1	4	2	1						2	1	2	6
90 Ridgetown				2	3	2	1				1	2	4	8	
91 Rockland					1	1	1	1	1				2	1	1
92 Sault Ste. Marie				9	8	6	3	2				1	7	13	12
93 Shelburne					4		5		1				1	3	6
94 Simcoe		3	7	9	4	2					5	7	14	6	2
95 Smithville					1	1	1		1			2	1	3	2
96 Stirling			2	2	1	1						2	1	1	2
97 Streetsville			1		1				1			2		2	
98 Sudbury				1	2	5	4		1		1	2	4	11	1
99 Sydenham				2	3	5	2	5	1			1		5	7
100 Thorold			1		8		2					1		3	1
101 Tillsonburg			1	2	3	4	3					1	5	7	7
Toronto—															
102 Commerce		1	8	12	11	17	2				2	18	48	36	17
103 Davenport	1	1	4	6	2	1	1				1	7	3	4	
104 North		1	6	18	15	9	4					10	9	13	10
105 Trenton			1	5	4	3	3	2	1			3	4	13	11
106 Tweed				3	1	4						2	4	6	1
107 Uxbridge				3	2		2	1	1		1	4	2	9	4
108 Vienna			2	1	1								2	1	
109 Walkerton		1	1	1	2	1		1					2	1	2
110 Wallaceburg		2	2	3	2	5						1	3	4	5
111 Wardsville			1		1	2							2	1	2
112 Waterdown			2	2	3								3	2	2
113 Waterford			1									2	5	2	4

AND HIGH SCHOOLS (Continued)

AGE, SEX AND GRADE (Continued)

Upper School																								
				Boys							Girls							Total No. of Boys	Total No. of Girls	Total number enrolled
	19 years	20 years	21 and over	14 years	15 years	16 years	17 years	18 years	19 years	20 years	21 and over	15 years	16 years	17 years	18 years	19 years	20 years	21 and over			
58																			23	31	54
59	2	2					3	2	3					1	2	3	1		49	65	114
60	1		1				1		1	1				3	1				51	71	122
61								1	1				1	2	2	1			52	72	124
62																			36	64	100
63								1					1		1				43	56	99
64	2																		23	23	46
65						1	1	1				1		1					37	60	97
66	2																		23	56	79
67																			10	10	20
68	6	1					2	2	2				1	1	2	2	1		98	95	193
69	1																		16	23	39
70	1	1												1					68	75	143
71	3		2																33	51	84
72	2	4																	62	73	135
73	1																		17	35	52
74	9	1	1					1	1	1	1					2			61	93	154
75	3	1				1	1	1	3	2				2	3	1			126	128	254
76	1					3							2		1		1		45	75	120
77	4	1				1		1							2	2			44	63	107
78	1																		51	79	130
79		1					2	1						3					95	76	171
80																			23	36	59
81	2																		54	89	143
82		1																	21	24	45
83		1																	23	35	58
84	2	2																	20	50	70
85	3	1				1	1	2		1	1			1	2				47	90	137
86							1					1	1	1	2	1			46	44	90
87	1																		10	15	25
88	1	1	1				2	3							1		1		53	62	115
89	1																		41	46	87
90						1	1	1	1					1	2				58	81	139
91																			12	12	24
92	6	1				2	2	2	2					1					147	195	342
93	2																		28	31	59
94						1	1	2		1			2						72	95	167
95	1																		25	32	57
96		1				1	1							1					34	61	95
97																			18	22	40
98	1					1		3											67	110	177
99	2	1				1	2							1		1			54	74	128
100																			35	38	73
101	2							1	1								1		46	78	124
102	3																		299	750	1,049
103																			116	89	205
104	1						1	5	3						2				173	164	337
105	2	1									1				1	1			61	89	150
106	3	2	1								1			1	1		1		25	52	77
107	2	1				2	3	1			1			3	2				60	91	151
108	1																		12	17	29
109	1	1					2	1	1					3	2	1			45	61	106
110	1					1	1	1											57	82	139
111		1																	12	23	35
112																			25	30	55
113																			28	41	69

COLLEGIATE INSTITUTES

IV. TABLE O—ATTENDANCE OF PUPILS BY

High Schools	Lower School—Form I																	
	Boys												Girls					
	10 years	11 years	12 years	13 years	14 years	15 years	16 years	17 years	18 years	19 years	20 years	21 and over	11 years	12 years	13 years	14 years	15 years	16 years
114 Watford	..	..	...	...	8	5	2	1	1	..	..	..	..	1	2	4	5	.....
115 Welland	..	..	...	6	7	11	14	6	1	..	..	..	..	2	10	13	13	9
116 Weston	..	..	5	11	15	7	6	1	..	..	..	..	..	1	8	24	20	4
117 Whitby	..	..	...	6	7	14	5	1	..	..	..	..	..	1	4	6	11	11
118 Wiarton	..	..	...	...	.....	1	5	...	..	..	..	..	..	...	1	2	4	1
119 Williamstown	..	..	...	1	1	5	3	1	..	..	..	..	..	1	3	6	1	3
120 Winchester	..	..	...	...	4	9	.....	...	..	..	..	..	..	...	.....	10	16	5
121 Wingham	..	..	...	1	9	6	3	...	..	..	..	..	..	...	1	10	4	12
Totals, 1920-21	1	16	198	884	1,932	1,847	1,078	329	81	18	5	7	14	206	1,119	2,250	2,339	1,324

AND HIGH SCHOOLS (Continued)

AGE, SEX AND GRADE (Continued)

Lower School—Form II

	Boys													Girls									
	12 years	13 years	14 years	15 years	16 years	17 years	18 years	19 years	20 years	21 and over	17 years	18 years	19 years	20 years	21 and over	12 years	13 years	14 years	15 years	16 years	17 years	18 years	19 years	20 years	21 and over
114	..	...	...	3	1	3	1	..	..	..	..	..	..	..	..	..	...	...	6	4	4	1	..	..	..
115	..	...	3	8	11	5	4	1	..	..	..	..	..	..	..	..	1	3	10	8	10	13	4	1	2
116	..	1	7	6	5	4	1	..	..	..	..	..	..	..	..	..	2	7	3	8	4	...	..	..	..
117	..	...	...	5	4	1	2	..	..	..	..	..	..	..	..	1	1	1	4	13	...	1	..	..	..
118	2	...	2	.....	1	5	2	2	..	..	..	..	..	..	..	..	...	1	1	4	6	1	1	..	1
119	..	1	1	5	2	3	1	..	1	..	..	..	..	..	..	..	1	...	7	7	5	2	2	..	..
120	..	...	2	3	6	8	4	..	..	..	..	..	..	..	..	..	...	4	9	10	2	2	..	..	..
121	1	...	...	4	4	3	1	..	..	1	..	..	..	..	..	..	...	1	9	3	...	4	..	..	..
	445	84	26	3	2	6	108	543	1,165	1,207	722	257	52	15	17	9	133	739	1,645	1,792	993	435	90	19	11

COLLEGIATE INSTITUTES

IV. TABLE O—ATTENDANCE OF PUPILS BY

High Schools	Middle School														
	Boys									Girls					
	13 years	14 years	15 years	16 years	17 years	18 years	19 years	20 years	21 and over	13 years	14 years	15 years	16 years	17 years	18 years
114 Watford	....	....	....	4	1	1	1	1	....	...	....	2	2	7	4
115 Welland	....	1	3	5	11	5	3	3	3	...	....	1	4	4	5
116 Weston	....	....	2	5	11	5	3	1	....	...	1	2	10	11	6
117 Whitby	....	....	2	4	4	3	....	....	....	...	....	1	6	6	5
118 Wiarton	....	....	1	3	1	3	2	....	1	...	....	2	2	1	1
119 Williamstown	....	....	....	1	2	1	....	1	....	...	....	....	1	2	1
120 Winchester	....	....	1	2	5	4	1	....	1	...	....	....	5	8	3
121 Wingham	....	....	1	1	7	2	....	1	1	...	....	2	9	1	7
Totals, 1920-21	9	90	401	936	1,092	769	367	154	98	6	93	510	1,108	1,300	943

SUMMARY OF ATTENDANCE

		10 yrs.	11 yrs.	12 yrs.	13 yrs.
LOWER SCHOOL Form I	Boys	1	16	198	884
	Girls	.....	14	206	1,119
LOWER SCHOOL Form II	Boys	.....	.....	6	108
	Girls	.....	.....	9	133
MIDDLE SCHOOL	Boys	.....	.....	.....	9
	Girls	.....	.....	.....	6
UPPER SCHOOL	Boys	.....	.....	.....	.....
	Girls	.....	.....	.....	.....
TOTALS BY SEXES	Boys	1	16	204	1,001
	Girls		14	215	1,258
GRAND TOTALS		1	30	419	2,259

AND HIGH SCHOOLS (Concluded)

AGE, SEX AND GRADE (Concluded)

				Upper School																		
				Boys								Girls							Total No. of Boys	Total No. of Girls	Total number enrolled.
19 years	20 years	21 and over	14 years	15 years	16 years	17 years	18 years	19 years	20 years	21 and over	15 years	16 years	17 years	18 years	19 years	20 years	21 and over			
114	2	....	..	..	..	..	....	....	....	1	..	..	..	....	1	1	..	..	34	46	80
115	1	....	1	..	1	2	3	2	1	1	2	..	..	1	3	....	..	..	123	124	247
116	3	....	..	..	..	..	3	2	....	..	..	..	1	1	....	....	..	..	101	118	219
117	....	....	..	..	..	..	....	1	....	..	..	..	..	1	....	....	..	..	59	73	132
118	3	2	5	..	..	..	....	2	1	1	..	..	..	1	....	....	..	..	33	43	76
119	2	1	1	..	..	..	2	....	....	..	..	..	..	....	1	1	..	..	32	48	80
120	....	1	..	..	..	1	1	2	....	..	..	..	..	1	2	....	..	..	54	78	132
121	1	1	..	..	..	..	1	2	2	1	1	..	..	1	....	1	1	..	52	69	121
	410	140	45	1	18	83	197	263	148	72	35	18	67	209	217	116	33	14	15,221	18,907	34,128

BY AGE, SEX, AND GRADE, June, 1921

14 yrs.	15 yrs.	16 yrs.	17 yrs.	18 yrs.	19 yrs.	20 yrs.	21 yrs. or over	TOTALS
1,932	1,847	1,078	329	81	18	5	7	6,396
2,250	2,339	1,324	445	84	26	3	2	7,812
543	1,165	1,207	722	257	52	15	17	4,092
739	1,645	1,792	993	435	90	19	11	5,866
90	401	936	1,092	769	367	154	98	3 916
93	510	1,108	1,300	943	410	140	45	4,555
1	18	83	197	263	148	72	35	817
.....	18	67	209	217	116	33	14	674
2,566	3,431	3,304	2,340	1,370	585	246	157	15,221
3,082	4,512	4,291	2,947	1,679	642	195	72	18,907
5,648	7,943	7,595	5,287	3,049	1,227	441	229	34,128

INDUSTRIAL, TECHNICAL

DAY

I. TABLE P—Attendance, Number of Pupils in the

Day Schools	Number of Teachers	Attendance of full time pupils						Attendance of part time pupils			
		Total number of pupils on the roll for the year	Pupils admitted for the first time to a Secondary School	Males on the roll	Females on the roll	Average daily attendance for the year	Days the school was open	Total number on the roll	Male	Female	Student Hours
1 Brantford	2	22	20	22	.....	16	198	....	....	....	.....
2 Chatham	5	38	29	29	9	27	192	2	1	1	968
3 Collingwood	2	31	23	31	.....	19	98	....	....	....	.....
4 Haileybury	6	51	37	36	15	41	184	....	....	....	.....
5 Hamilton	27	494	306	393	101	434	199	159	142	17	13,869
6 Kingston	3	60	60	60	.....	30	75	25	25	....	5,000
7 London	12	196	128	121	75	158	184	....	....	....	.....
8 Niagara Falls	3	38	21	38	.....	26	179	....	....	....	.....
9 Ottawa	20	188	123	148	40	117	185	330	....	330	5,228
10 Sault Ste. Marie	8	16	13	16	.....	15	184	....	....	....	.....
11 Sudbury	2	33	10	33	.....	25	178	....	....	....	.....
12 Toronto	91	1,378	621	957	421	1,175	185	391	54	337	15,931
13 Windsor	10	55	31	43	12	40	191	....	....	....	.....
Totals 1920-21	191	2,600	1,422	1,927	673	2,123	2,232	907	222	685	40,996

Attendance, Pupils in the Various

Day Schools	Religious and other Exercises					English Literature	Reading	Composition and Spelling	Grammar
	Schools where the Bible or selections therefrom used	Schools where passages are memorized	Schools opened with prayer	Schools closed with prayer	Commencement Exercises				
1 Brantford	1	.....	1	.....	.....	22	22	22	.....
2 Chatham	1	1	1	.....	.....	38	38	38	38
3 Collingwood	.....	.....	.....	.....	.....	.....	.....	20	.....
4 Haileybury	.....	.....	1	.....	1	51	38	51	15
5 Hamilton	.....	.....	.....	.....	.....	494	311	494	464
6 Kingston	.....	.....	.....	.....	.....	.....	.....	.....	.....
7 London	1	.....	1	1	.....	196	.....	196	185
8 Niagara Falls	1	.....	1	.....	1	38	23	38	23
9 Ottawa	1	.....	1	.....	1	188	188	188	188
10 Sault Ste. Marie	.....	.....	1	.....	1	16	13	13	13
11 Sudbury	1	.....	1	.....	1	33	10	33	17
12 Toronto	1	.....	1	.....	1	1,386	.....	1,378	1,046
13 Windsor	.....	.....	1	.....	1	50	31	50	50
Totals 1920-21	7	1	10	1	7	2,512	674	2,521	2,039

AND ART SCHOOLS

SCHOOLS

Various Branches of Instruction, Etc.

	Attendance of special pupils				Number of Pupils from Families whose head is occupied as below							
	Total number on the roll	Male	Female	Student Hours	Commerce	Agriculture	Law, Medicine Dentistry or the Church	Teaching	The Trades and Industries	Labouring Occupations	Other Occupations	Without Occupation
1	....	.....	....	.....	2	2	1	.....	13	3	.....	1
2	....	.....	....	.....	7	3	1	.....	6	6	17	.....
3	....	.....	....	.....	.....	.....	.....	.....	.....	.....	25	6
4	8	8	....	2,190	6	3	.....	.....	23	13	5	1
5	70	43	27	4,200	103	44	6	3	182	26	94	36
6	6	6	....	600	.....	.....	.....	.....	.....	.....	.....	.....
7	51	38	13	.....	48	39	2	4	63	37	28	26
8	....	.....	....	.....	11	6	.....	.....	8	11	1	1
9	12	12	....	546	13	12	2	.....	79	33	30	19
10	16	8	8	673	6	1	.....	.....	9	.....	.....	.....
11	....	.....	....	.....	9	.....	.....	2	10	6	6	.....
12	856	233	623	215,361	387	34	58	21	559	32	153	134
13	....	.....	....	.....	5	.....	.....	.....	7	26	17	.....
	1,019	348	671	223,570	597	144	70	30	959	193	376	224

Branches of Instruction, Etc. (Continued)

	History and Civics	Geography	Arithmetic	Algebra	Geometry	Trigonometry	Shop Mathematics	Surveying and Mapping	General Physics
1	22	22	22	22	22	.....	.....	.....	22
2	38	38	38	9	9	9	9	.....	38
3	.....	.....	31	.....	.....	.....	.....	.....	20
4	51	48	38	43	13	13	.....	13	51
5	388	280	329	512	512	15	171	.....	.....
6	.....	.....	.....	.....	.....	.....	.....	.....	.....
7	196	173	163	119	121	.....	142	.....	196
8	38	23	23	.....	.....	.....	.....	.....	38
9	188	180	188	72	8	8	.....	.....	188
10	13	13	16	16	16	.....	16	.....	16
11	27	10	17	33	33	23	.....	23	27
12	1,379	678	1,046	1,158	1,158	367	834	.....	1,281
13	50	50	55	43	.....	15	.....	.....	31
	2,390	1,515	1,966	2,027	1,892	450	1,172	36	1,908

INDUSTRIAL, TECHNICAL

DAY

I. TABLE P—Attendance, Number of Pupils in the

Day Schools	Chemistry for Nurses	Metallurgy and Assaying	Mineralogy and Geology	Mechanical Drawing	Machine Drawing and Design	Architectural Drawing	Machine Shop Work	Forge Work	Foundry Work	General Wood Working	Joinery and Cabinet Making	Pattern Making
1 Brantford	.....	.....	.....	22	22	....	....	....	....	22	22	....
2 Chatham	.....	.....	.....	30	....	....	9	....	....	21	....	9
3 Collingwood	.....	.....	.....	.....	....	....	....	....	....	....	....	....
4 Haileybury	.....	20	36	36	....	....	....	....	....	....	....	....
5 Hamilton	.....	.....	.....	397	30	8	339	....	....	226	167	270
6 Kingston	.....	.....	.....	.....	....	....	....	....	....	....	....	....
7 London	.....	.....	.....	163	163	....	163	....	....	134	....	15
8 Niagara Falls	.....	.....	.....	38	38	....	....	....	....	38	....	38
9 Ottawa	.....	.....	.....	148	....	148	84	....	....	100	72	....
10 Sault Ste. Marie	.....	13	.....	16	16	....	16	16	....	13	....	....
11 Sudbury	.....	16	33	17	....	....	....	....	....	....	....	....
12 Toronto	363	16	.....	792	45	35	262	262	262	536	256	256
13 Windsor	.....	.....	.....	43	....	....	15	....	....	28	....	....
Totals 1920-21	363	65	69	1,702	314	191	888	278	262	1,118	517	588

Attendance, Pupils in the Various

Day Schools	Industrial Design	Illustrating	Antique Drawing	Still Life Drawing	Life Drawing	Modelling	Pottery	Art Metal Work	Stained Glass	History of Art	Cooking	Housekeeping	Home Economics	Home Nursing	Hygiene and Dietetics	Sewing and Dress Making	Laundry	Millinery
1 Brantford	....	....	....	....	..	..	..	..	..	....	....	....	....	....	.....	.....	....	.....
2 Chatham	....	....	....	....	..	..	..	..	..	....	10	10	10	10	10	10	10	10
3 Collingwood	....	....	....	....	..	..	..	..	..	....	....	....	....	....	.....	.....	....	.....
4 Haileybury	....	....	....	....	..	..	..	..	..	....	....	....	....	....	.....	.....	....	.....
5 Hamilton	33	47	53	53	..	2	..	..	..	237	111	...	70	31	237	117	...	112
6 Kingston	....	....	....	....	..	..	..	..	..	....	....	....	....	....	.....	.....	....	.....
7 London	....	....	....	....	..	..	..	..	..	....	84	....	....	19	126	84	29	84
8 Niagara Falls	....	....	....	....	..	..	..	..	..	....	....	....	....	....	.....	.....	....	.....
9 Ottawa	....	....	....	....	..	..	..	..	..	....	157	40	40	40	40	161	40	108
10 Sault Ste. Marie	....	....	....	....	..	..	..	..	..	....	....	....	....	....	.....	.....	....	.....
11 Sudbury	....	....	....	....	..	..	..	..	..	....	....	....	....	....	.....	.....	....	.....
12 Toronto	267	75	76	72	32	70	49	2	2	30	482	44	213	74	230	471	34	354
13 Windsor	....	....	....	....	..	..	..	..	..	....	12	12	12	12	12	12	...	.....
Totals 1920-21	300	122	129	125	85	72	49	2	2	267	856	106	345	186	655	855	113	668

AND ART SCHOOLS (Continued)

SCHOOLS

Various Branches of Instruction, Etc. (Continued)

	Carpentry and Building Construction	Plumbing	Steam Engineering	Power Plant Operation	Electrical Wiring and Machinery	Printing and Bookbinding	Automobiles and Gas Engines	Elementary Drawing	Color Study	Lettering and Show Cards	Electricity	Applied Mechanics	Chemistry (General)	Chemistry (Industrial)
1	....	....	....	....	....	....	....	.....	.....	.....	22	.....	.....	.....
2	....	....	....	....	....	....	....	9	.....	.....	.....	.....	9	9
3	....	....	11	....	....	....	....	.....	.....	.....	.....	11	.....	.....
4	....	....	....	....	....	....	....	15	.....	.....	13	.....	36	.....
5	....	....	8	....	....	219	143	237	53	27	393	57	67	.....
6	....	....	....	....	....	....	....	.....	.....	.....	.....	.....	.....	.....
7	....	....	....	....	....	....	....	.....	.....	.....	71	.....	138	.....
8	....	....	....	....	....	....	....	38	.....	.....	.....	.....	.....	.....
9	148	....	....	....	147	....	148	40	40	40	147	.....	44	.....
10	....	....	....	....	....	....	....	13	.....	16	.....	.....	16	.....
11	....	....	....	....	....	....	....	.....	.....	.....	27	16	33	.....
12	30	183	25	45	207	240	96	747	69	94	89	23	1,103	22
13	....	....	....	....	....	....	....	12	.....	.....	.....	.....	24	.....
	178	183	44	45	354	459	387	1,111	162	177	762	107	1,470	31

Branches of Instruction, Etc. (Concluded)

	Embroidery and Lace Work	French	German	Economics	Writing	Bookkeeping	Typewriting	Optometry	Horology	Physical Training	Study of Materials	Chart Work	Navigation	Marine Engineering	Latin	Mining
1	....	.....	...	.....	.....	...	....	.....	.....	....	.....	.....	.....	.....	.....	.....
2	....	.....	...	.....	38	2	....	.....	.....	38	.....	.....	.....	.....	.....	.....
3	....	.....	...	.....	20	...	....	.....	.....	.....	.....	20	.....	.....	.....	.....
4	....	32	...	23	28	...	....	.....	.....	51	.....	.....	.....	.....	.....	.....
5	....	157	...	.....	237	...	....	.....	.....	101	.....	.....	.....	.....	.....	.....
6	....	.....	...	.....	.....	...	....	.....	.....	.....	.....	.....	41	19	.....	.....
7	84	56	...	...	48	...	....	.....	.....	196	129	.....	.....	....	56	.....
8	....	.....	...	.....	.....	...	....	.....	.....	38	.....	.....	.....	.....	.....	.....
9	....	40	...	...	140	23	....	.....	.....	188	188	.....	.....	.....	.....	.....
10	....	.....	...	.....	.....	...	....	.....	.....	16	.....	.....	.....	.....	.....	.....
11	....	.....	...	.....	10	...	....	.....	.....	33	.....	.....	.....	.....	.....	16
12	52	655	8	.....	150	...	....	34	14	1,378	.....	.....	.....	.....	524	.....
13	....	12	...	.....	.....	...	12	.....	.....	.....	.....	.....	.....	.....	.....	.....
	136	952	8	23	681	25	12	34	14	2,039	317	20	41	19	580	16

INDUSTRIAL, TECHNICAL

DAY

II. TABLE Q—Value of

Day Schools	Value of Equipment						
	Library	Maps and Charts	Laboratory and Work Shop Tables	Machines and Tools	Scientific Apparatus	Drawing Instruments	Drawing Models
	$	$					
1 Brantford	40	.....	886	2,510	312	113	55
2 Chatham	249	12	341	9,292	681	241	7
3 Collingwood	251	18	250	.....	242	46	.....
4 Haileybury	161	125	942	977	121	16	.....
5 Hamilton	897	110	5,934	31,014	10,176	434	2,012
6 Kingston	75	50	40	.....	100	45	.....
7 London	729	107	422	17,215	6,222	920	867
8 Niagara Falls	23	.....	121	15,640	2,273	527	.....
9 Ottawa	158	10	5,989	19,546	6,408	489	14
10 Sault Ste. Marie	.....	.....	.....	.....	35	.....	.....
11 Sudbury	293	.....	235	2,237	286	46	.....
12 Toronto	3,903	125	43,943	80,043	21,266	2,645	589
13 Windsor	103	.....	350	21,626	758	274	.....
Totals 1920-21	6,882	557	59,453	200,100	48,880	5,796	3,544

AND ART SCHOOLS (Continued)

SCHOOLS

Equipment, Etc.

	Value of Equipment								
	Stoves, Ranges and Utensils	Equipment for Dressmaking	Equipment for Millinery	Equipment for Laundry	Equipment for Home Nursing	Equipment for Physical Culture	Other Equipment Not Specified	Total Value of Equipment	School Buildings, Grounds and Furniture
	$	$	$	$	$	$	$	$	$
1	623	296	40	.....	73	.....	.....	4,948	.....
2	1,762	255	34	.....	13	.....	1,863	14,750	.....
3	.....	.....	.....	.....	.....	.....	95	902	31
4	.....	.....	.....	.....	.....	.....	7,986	10,328	20,000
5	527	482	33	.....	48	134	5,286	57,087	382,384
6	.....	.....	.....	.....	.....	.....	.....	310	.....
7	3,975	1,195	131	1,617	.....	.....	14,223	47,623	300,000
8	746	296	.....	.....	.....	.....	384	20,010	147,106
9	241	9	.....	.....	.....	.....	48	32,912	350,000
10	.....	.....	.....	.....	.....	.....	.....	35	.....
11	.....	.....	.....	.....	.....	.....	79	3,176	.....
12	3,804	3,569	247	1,798	99	2,629	44,730	209,390	1,759,160
13	91	418	27	.....	114	90	872	24,723	.....
	11,769	6,520	512	3,415	347	2,853	75,566	426,194	2,958,681

INDUSTRIAL, TECHNICAL

EVENING

III. TABLE R—Attendance, Pupils in the

Evening Schools	Number of Teachers	Attendance									Textile Industries	Chemical Industries	Sheet Metal Work
		Total number of pupils on the roll for the year	New pupils admitted during the year	Boys and men on roll	Girls and women on roll	Pupils whose birthplace is Canada	Pupils whose birthplace is the British Isles	Pupils who were born in other countries	Evenings the School was open	Aggregate number of students hours for the year			
1 Barrie	7	118	118	35	83	110	6	2	42	6,244	...	...	...
2 Beamsville	4	54	50	33	21	50	4	.....	37	2,216	...	...	...
3 Belleville	12	229	187	62	167	160	55	14	48	193,542	...	...	...
4 Brantford	24	1,012	800	489	523	750	237	25	87	19,946	56	2	18
5 Brockville	17	337	204	142	195	267	56	14	48	8,696	6	2	3
6 Chatham	14	410	360	210	200	326	67	17	88	12,036	17	...	...
7 Cobourg	6	92	66	29	63	72	18	2	69	1,980	2	...	...
8 Collingwood	5	102	74	27	75	77	20	5	48	2,882	...	...	...
9 Dundas	6	86	57	46	40	63	21	2	115	4,386	...	...	...
10 Espanola	4	70	33	57	13	52	4	14	96	2,949	...	1	...
11 Fairbank	9	132	132	53	79	30	99	3	83	21,912	...	...	1
12 Fort William	21	611	407	245	366	335	202	74	99	15,043	...	4	...
13 Galt	12	394	284	147	247	246	135	13	160	14,274	5	...	4
14 Gananoque	7	88	88	38	50	85	3	.....	50	3,176	...	...	...
15 Goderich	5	74	43	22	52	59	15	.....	95	1,606	...	...	...
16 Guelph	22	452	312	190	262	278	153	21	47	15,227	41	...	2
17 Hamilton	79	2,610	1,740	1,562	1,048	1,136	1,008	466	122	73,099	176	5	17
18 Ingersoll	6	103	37	54	49	94	8	1	48	3,983	...	...	...
19 Iroquois Falls	4	69	5	56	13	42	13	14	58	804	...	...	...
20 Kenora	9	103	103	50	53	76	10	17	26	3,574	...	...	...
21 Kitchener	16	578	568	144	434	482	48	48	121	20,474	...	...	...
22 Lindsay	13	300	300	195	105	284	13	3	80	8,120	4	...	...
23 London	40	1,615	1,281	847	768	1,073	461	81	120	55,374	57	7	14
24 Newmarket	5	81	66	30	51	70	11	.....	66	1,164	3	...	...
25 Niagara Falls	15	381	191	272	109	186	154	41	118	4,484	...	...	7
26 North Bay	9	216	186	92	124	174	30	12	43	6,262	...	...	...
27 Orillia	9	81	69	42	39	57	21	3	43	3,529	5	...	2
28 Oshawa	8	81	9	65	16	39	28	14	40	4,346	...	...	...
29 Ottawa	54	3,310	1,773	928	2,382	2,722	439	149	155	90,400	...	...	9
30 Owen Sound	32	722	381	203	519	635	80	7	127	14,750	20	...	...
31 Pembroke	13	175	99	52	123	157	13	5	89	5,464	...	...	3
32 Peterborough	15	383	276	187	196	258	107	18	92	10,800	20	2	4
33 Port Arthur	15	315	242	169	146	162	98	55	62	4,895	...	18	3
34 Port Hope	9	87	59	20	67	66	18	3	43	4,428	...	...	5
35 Preston	6	49	31	25	24	32	15	2	86	2,202	7	...	...
36 Renfrew	8	175	134	82	93	102	47	26	102	3,280	14	...	...
37 St Catharines	10	277	205	128	149	135	122	20	88	7,778	6	...	3
38 St Thomas	12	199	149	101	98	115	56	28	64	7,134	21	...	2
39 Sarnia	21	422	235	111	311	349	30	43	90	16,876	...	2	...
40 Sault Ste Marie	8	177	149	123	54	35	13	129	90	6,387	...	...	...
41 South Porcupine	7	101	3	78	23	40	32	29	115	3,270	...	1	...
42 Stratford	9	285	190	174	111	162	108	15	108	8,620	21	...	6
43 Sturgeon Falls	4	60	60	30	30	58	2	.....	38	1,624	...	...	...
44 Sudbury	8	147	147	89	58	71	38	38	45	2,649	...	1	...
45 Timmins	8	83	55	69	14	40	22	21	87	3,603	...	...	...
46 Toronto	209	8,023	4,415	4,174	3,849	4,666	2,804	553	113	353,807	20	65	36
47 Walkerville	21	355	324	234	121	147	181	27	125	11,746	...	...	1
48 Welland	9	120	101	69	51	51	56	13	38	3,616	27	3	4
49 Whitby	6	92	60	42	50	86	6	.....	99	1,716	...	...	...
50 Windsor	25	1,069	967	664	405	637	305	127	102	37,274	3	...	6
51 Woodstock	12	192	128	94	98	125	60	7	69	5,640	23	1	2
Totals, 1920-21	909	27297	17953	13080	14217	17524	7552	2221	....	1119287	554	114	152

AND ART SCHOOLS (Continued)

SCHOOLS

various Branches of Instruction, Etc.

Occupation of pupils on entering school

	Machine Shop Work	Forge Work	Foundry Work	Leather Work	Cabinet making and Joinery	Carpentry and Building Construction	Painting and Decorating	Plumbing	Power Plant Operating	Electrical Work	P'ting or B'kbinding	Photography	Other Trades	Art and Design	Women at work in factories	Women at work in shops and stores	House Workers	Housekeepers	Other Occupations	Without Occupations
1	10	...	...	..	....	....	...	...	...	...	2	..	...13	...	5	25	18	25	18	2
2	....	...	...	..	....	....	...	...	....	....	...	..	33	...	.....	3	...	18	.....	.....
3	15	...	...	..	....	....	...	7	....	6	2	1	25	...	10	19	17	51	72	4
4	56	8	36	6	24	20	2	4	122	30	...	..	87	...	88	139	23	178	87	26
5	18	3	21	..	7	9	3	2	....	6	1	..	27	...	4	28	6	118	72	1
6	8	...	...	..	....	28	1	5	....	6	2	..	108	...	23	44	8	65	43	52
7	....	...	...	..	....	....	...	...	....	....	...	..	10	...	12	10	6	40	12	.....
8	12	...	...	1	....	5	...	1	....	....	...	..	4	...	.....	10	2	58	2	7
7	18	...	...	..	4	2	1	...	....	...	2	..	.....	...	9	10	...	12	26	2
10	5	2	...	..	....	4	1	...	....	2	...	..	5	1	.....	1	1	4	42	1
11	2	...	1	..	....	8	1	1	....	2	3	..	6	...	9	10	...	42	42	4
12	13	5	...	..	12	17	...	3	41	9	4	..	67	...	22	58	37	94	225	.....
13	67	...	8	5	1	4	...	3	....	7	3	..	10	...	56	11	1	109	95	5
14	4	...	5	..	....	....	...	...	....	....	...	..	29	...	.....	8	2	18	12	10
15	....	...	...	..	....	....	...	...	11	....	...	..	13	...	9	4	10	15	12	.....
16	32	4	17	11	7	7	1	1	....	9	3	..	.....	...	67	41	15	99	89	6
17	124	...	23	..	3	83	6	2	....	99	68	2	222	...	100	55	15	254	1,073	283
18	36	...	...	..	....	1	...	...	....	....	...	..	4	...	3	3	...	12	38	6
19	10	3	...	..	....	12	...	...	4	4	...	..	23	...	6	1	...	5	1	.....
20	10	...	...	..	....	6	...	...	7	2	...	..	25	...	.....	6	4	29	14	.....
21	20	...	...	..	2	...	...	...	....	...	...	..	119	...	80	27	...	101	191	38
22	27	...	...	..	2	6	...	1	....	...	...	1	13	...	6	12	3	68	157	.....
23	127	5	49	24	28	58	12	29	25	37	45	..	244	211	71	62	45	245	157	63
24	....	...	4	1	4	...	...	...	1	...	1	..	14	...	14	2	6	21	6	4
25	40	9	...	..	....	17	...	3	....	32	...	..	26	...	18	5	4	24	167	19
26	25	...	3	..	....	45	1	...	....	1	...	1	30	...	.....	30	...	35	25	20
27	13	...	2	2	8	...	...	1	....	...	...	..	9	...	10	6	9	12	.....	2
28	12	...	6	4	8	5	4	2	....	9	...	..	5	...	.....	6	8	2	10	.....
29	93	1	...	..	1	29	9	36	....	42	54	3	49	...	47	317	97	514	1,660	349
30	28	3	23	..	70	16	2	...	18	3	7	..	16	...	94	101	50	231	35	5
31	2	...	...	2	....	13	...	...	....	3	...	..	13	...	16	7	16	31	40	29
32	31	...	...	1	....	2	...	1	1	26	4	1	44	...	23	52	5	71	81	14
33	26	5	2	..	....	6	2	12	8	25	2	..	17	...	.....	53	17	35	70	14
34	8	...	4	..	....	1	...	...	....	...	...	..	2	...	2	14	6	26	19	.....
35	1	...	...	7	2	1	...	...	....	...	...	..	10	1	12	3	...	2	.....	3
36	10	...	...	..	4	8	4	...	2	12	2	..	11	...	26	22	20	5	25	10
37	22	9	11	7	1	6	...	3	4	15	...	..	41	...	22	7	3	74	24	19
38	10	...	10	..	....	4	5	6	2	5	6	..	20	...	5	20	2	15	66	.....
39	21	1	7	..	....	5	...	...	....	3	...	2	32	...	4	5	8	118	150	64
40	....	...	...	..	....	....	...	...	....	....	...	..	123	...	.....	10	9	35	.....	.....
41	9	1	...	..	....	....	...	2	....	6	...	1	1	...	.....	2	...	4	74	.....
42	25	...	...	5	10	13	3	4	....	5	2	..	66	...	47	11	...	21	46	.....
43	1	...	...	..	....	4	...	...	....	....	...	..	19	...	3	13	12	.....	8	.....
44	5	2	1	..	....	4	...	2	7	10	2	..	11	...	1	29	15	19	34	4
45	8	...	...	..	....	4	...	2	....	6	...	..	.....	...	.....	4	...	10	49	.....
46	360	21	29	8	42	138	54	204	32	285	186	29	986	56	469	220	176	440	3,541	626
47	94	1	2	..	....	....	2	1	1	5	1	..	82	...	.....	12	2	43	86	22
48	18	5	3	..	....	1	...	...	1	3	1	..	5	...	30	3	8	8	.....	.....
49	....	8	2	1	....	3	...	...	....	2	1	..	26	...	.....	11	2	30	1	5
50	155	2	12	1	9	34	12	30	20	68	7	4	49	...	39	39	64	159	345	11
51	9	6	1	..	10	7	3	1	3	2	1	..	25	...	34	12	3	14	18	17
1	640	104	282	86	259	636	129	369	310	787	412	45	2,819	269	1.496	1,603	755	3,669	9,06[illegible]	1,747

INDUSTRIAL, TECHNICAL

EVENING

III. TABLE R—Attendance, pupils in the

Number of pupils in the various branches of instruction

Evening Schools	English Literature	Reading	Composition and Spelling	Grammar	History and Civics	English for Non-English Speaking Persons	Geography	Bookkeeping for Industrial Purposes	Civil Service	Arithmetic
1 Barrie	.....	.....	15	.....	...	.....	...	8	...	15
2 Beamsville	.....	.....	.....	.....	...	.....	...	.....	...	.....
3 Belleville	.....	.....	16	.....	...	4	...	.....	...	15
4 Brantford	31	31	31	.....	...	30	...	58	...	31
5 Brockville	.....	.....	25	25	...	7	...	.....	...	25
6 Chatham	.....	.....	.....	.....	...	.....	26	.....	...	.....
7 Cobourg	.....	.....	.....	.....	...	.....	...	.....	...	.....
8 Collingwood	.....	.....	.....	.....	...	.....	...	.....	...	.....
9 Dundas	21	.....	21	.....	...	.....	...	.....	...	21
10 Espanola	6	6	4	.....	...	22	...	3	...	13
11 Fairbank	.....	.....	.....	.....	...	.....	...	.....	...	49
12 Fort William	31	31	31	31	31	74	31	14	...	31
13 Galt	.....	.....	.....	.....	...	.....	...	.....	...	.....
14 Gananoque	18	18	18	18	...	.....	...	.....	...	30
15 Goderich	.....	.....	.....	.....	...	.....	...	16	...	3
16 Guelph	44	44	44	44	...	.....	...	19	...	.....
17 Hamilton	394	394	394	394	...	.....	...	.....	...	394
18 Ingersoll	.....	.....	.....	.....	...	.....	...	.....	...	.....
19 Iroquois Falls	.....	.....	.....	.....	...	12	...	.....	...	6
20 Kenora	4	.....	.....	.....	...	.....	...	9	...	4
21 Kitchener	.....	.....	14	.....	...	.....	...	.....	...	15
22 Lindsay	.....	.....	.....	.....	...	.....	...	.....	...	17
23 London	256	256	256	256	256	256	256	256	256	256
24 Newmarket	22	22	22	.....	...	.....	...	.....	...	22
25 Niagara Falls	62	62	62	.....	...	.....	...	45	...	.....
26 North Bay	.....	.....	.....	.....	...	.....	...	.....	...	.....
27 Orillia	.....	.....	18	.....	...	.....	...	.....	...	18
28 Oshawa	18	18	18	18	18	6	...	.....	...	18
29 Ottawa	288	288	288	288	...	.....	...	.....	...	288
30 Owen Sound	.....	.....	83	.....	...	.....	...	.....	...	90
31 Pembroke	45	45	45	.....	...	.....	...	19	...	45
32 Peterborough	.....	.....	.....	.....	...	.....	...	.....	...	27
33 Port Arthur	20	20	20	20	...	45	...	.....	...	22
34 Port Hope	.....	.....	.....	.....	...	.....	...	.....	...	.....
35 Preston	.....	.....	.....	.....	...	.....	...	9	...	.....
36 Renfrew	.....	.....	.....	.....	...	.....	...	22	...	5
37 St. Catharines	.....	.....	.....	.....	...	.....	...	.....	...	48
38 St. Thomas	.....	.....	.....	.....	...	.....	...	.....	...	19
39 Sarnia	22	22	22	.....	...	8	...	50	...	22
40 Sault Ste. Marie	.....	.....	.....	.....	...	129	...	.....	...	13
41 South Porcupine	.....	.....	.....	.....	...	28	...	12	...	46
42 Stratford	.....	.....	15	.....	...	.....	...	.....	...	.....
43 Sturgeon Falls	.....	14	14	.....	...	.....	...	27	...	14
44 Sudbury	.....	.....	.....	.....	...	42	...	15	...	27
45 Timmins	.....	.....	.....	.....	...	17	...	14	...	11
46 Toronto	954	900	900	900	...	.....	...	.....	...	1,770
47 Walkerville	.....	.....	.....	.....	...	14	...	.....	...	35
48 Welland	.....	.....	.....	.....	...	14	...	.....	...	20
49 Whitby	.....	.....	.....	.....	...	.....	...	.....	...	20
50 Windsor	.....	.....	.....	.....	...	97	...	.....	...	98
51 Woodstock	.....	.....	.....	.....	...	.....	...	.....	...	.....
Totals, 1920-21	2,236	2,171	2,376	1,994	305	805	133	596	256	3,603

AND ART SCHOOLS (Continued)

SCHOOLS

various Branches of Instruction, Etc. (Continued)

Number of pupils in the various branches of instruction

	Algebra	Geometry	Trigonometry	Shop Mathematics	Surveying and Mapping	General Physics	Electricity, Theory	Electricity, Applied	Applied Mechanics	General Chemistry	Chemistry of the Trades and Industries	Metallurgy and Assaying	Mining, Underground	Mining, Mill Work	Minerology and Geology	Mechanical Drawing	Machine Drawing and Design	Architectural Drawing
1	.....	.....	.....	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
3	22	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	17	.....	.....
4	20	.....	.....	20	.....	.....	.....	83	.....	.....	.....	.....	.....	.....	.....	48	.....	14
5	1	.....	.....	2	.....	31	31	31	.....	.....	31	.....	.....	.....	.....	31	.....	.....
6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	17	.....	.....
7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
8	.....	.....	.....	21	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	21	.....	.....
9	8	3	.....	18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	18	.....	5
10	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10	.....	.....
11	.....	.....	18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	18	.....	.....
12	.....	.....	.....	19	.....	6	19	16	...	16	2	.....	.....	.....	.....	19	15	4
13	.....	.....	.....	54	.....	.....	.....	8	.....	.....	.....	.....	.....	.....	.....	39	.....	.....
14	5	.....	.....	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10	10	.....
15	.....	2	2	19	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
16	.....	.....	.....	.....	.....	.....	43	43	...	.....	.....	.....	.....	.....	.....	14	.....	.....
17	.....	.....	.....	165	.....	.....	135	72	23	49	.....	.....	.....	.....	.....	179	74	62
18	.....	.....	.....	23	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	23	.....	.....
19	.....	.....	.....	14	.....	.....	10	.....	.....	.....	.....	.....	.....	.....	.....	16	.....	.....
20	.....	.....	.....	.....	.....	.....	5	5	.....	.....	.....	.....	.....	.....	.....	9	.....	.....
21	.....	.....	.....	22	.....	.....	.....	31	...	9	.....	.....	.....	.....	.....	21	.....	.....
22	.....	.....	.....	.....	.....	.....	.....	.....	.....	17	.....	.....	.....	.....	.....	.....	18	.....
23	.....	.....	.....	16	.....	.....	54	74	...	.....	.....	.....	.....	.....	.....	166	166	34
24	.....	.....	.....	22	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
25	.....	.....	.....	31	.....	.....	90	90	.....	.....	.....	.....	.....	.....	.....	54	.....	19
26	.....	.....	.....	29	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
27	.....	.....	.....	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7	7	.....
28	.....	.....	.....	11	.....	.....	.....	7	.....	.....	.....	.....	.....	.....	.....	11	.....	.....
29	.....	.....	.....	13	.....	.....	76	15	...	44	.....	.....	.....	.....	.....	40	.....	29
30	.....	.....	.....	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	14	15	.....
31	1	.....	.....	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9	.....	8
32	34	.....	.....	.....	.....	.....	23	.....	.....	.....	.....	.....	.....	.....	.....	26	17	.....
33	.....	.....	.....	13	.....	.....	.....	25	.....	.....	.....	.....	.....	.....	.....	13	.....	.....
34	.....	.....	.....	13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7	.....	.....
35	.....	.....	.....	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9	.....	3
36	.....	.....	.....	10	.....	.....	.....	.....	15	.....	.....	.....	.....	.....	.....	.....	.....	.....
37	.....	.....	.....	23	.....	.....	27	.....	.....	.....	.....	.....	.....	.....	.....	24	.....	.....
38	.....	.....	.....	.....	.....	.....	.....	5	.....	.....	.....	.....	.....	.....	.....	.....	19	.....
39	.....	.....	.....	30	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15	15	.....
40	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
41	18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	13	.....	.....
42	.....	.....	.....	51	.....	.....	.....	41	.....	.....	.....	.....	.....	.....	.....	26	.....	.....
43	14	14	14	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5	.....	.....
44	9	9	9	.....	.....	.....	16	16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
45	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9	21	.....	.....	16	.....
46	1,104	399	83	1,104	23	.....	597	641	36	100	190	13	.....	.....	15	300	243	167
47	.....	.....	.....	.....	.....	.....	.....	37	.....	.....	.....	.....	.....	.....	.....	25	.....	40
48	.....	.....	.....	26	.....	.....	17	.....	.....	.....	5	.....	.....	.....	.....	26	.....	.....
49	.....	.....	5	.....	.....	.....	.....	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
50	.....	.....	.....	14	.....	.....	.....	50	.....	.....	.....	.....	.....	.....	.....	37	.....	.....
51	.....	.....	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	1,250	424	131	1854	23	37	1,143	1,302	74	235	228	13	9	21	15	1,323	643	371

INDUSTRIAL, TECHNICAL

EVENING

III. TABLE R—Attendance, Pupils in the

Evening Schools	Number of pupils in the various branches of instruction									
	Sheet Metal Drawing	Machine Shop Work	Forge Work	General Wood Working	Cabinet Making and Joinery	Pattern Making	Carpentry and Building Construction	Painting and Decorating	Plumbing	Steam and Gas Engines and Power Plants
1 Barrie										
2 Beamsville										
3 Belleville										
4 Brantford	7				53		22			
5 Brockville				29						
6 Chatham		24		35						
7 Cobourg										
8 Collingwood										
9 Dundas										
10 Espanola										
11 Fairbank										
12 Fort William				21	14					5
13 Galt					23					
14 Gananoque										15
15 Goderich										
16 Guelph				48	48					
17 Hamilton	37	275		105	40	43	80			42
18 Ingersoll					11					
19 Iroquois Falls										
20 Kenora										
21 Kitchener				15						
22 Lindsay							10			
23 London	8	162			73		59		38	16
24 Newmarket										
25 Niagara Falls		29		14	14					
26 North Bay										
27 Orillia	1									
28 Oshawa										
29 Ottawa	16	55		73	73				28	
30 Owen Sound				66						
31 Pembroke										
32 Peterborough										
33 Port Arthur				20					13	
34 Port Hope										
35 Preston										
36 Renfrew										
37 St. Catharines										17
38 St. Thomas										
39 Sarnia				13						
40 Sault Ste. Marie										
41 South Porcupine										
42 Stratford										
43 Sturgeon Falls										
44 Sudbury										8
45 Timmins										
46 Toronto	16	126		150	23	4	105	37	156	722
47 Walkerville		78								
48 Welland				9						
49 Whitby							12			
50 Windsor		75			48		31		23	17
51 Woodstock		58	60		20					
Totals, 1920-21	85	882	60	598	440	47	319	37	258	842

AND ART SCHOOLS (Continued)

SCHOOLS

Various Branches of Instruction Etc. (Continued)

Number of pupils in the various branches of instruction

	Marine Engineering	Navigation	Clay Working	Printing and Book-binding	Photography, Photo-engraving and Lithography	Automobile Mechanics	Telegraphy	Elementary Drawing	Colour Study	Lettering	Show Card Writing	Industrial Design	Illustrating	Drawing and Painting from Antique	Drawing and Painting from Still Life
1							15								
2						25									
3											19				
4						79									
5						34		7	5	4	5			7	5
6						35	39								
7						13									
8															
9															
10															
11								6							6
12						37									
13						30									
14															
15															
16											26				
17				81		181	92		12	48	48	43		52	
18						18									
19															
20						27									
21			14												
22						69					16				
23						222					43	49	49	49	49
24											13				
25															
26															
27															
28						19									
29						379		70	70	70	93			70	70
30	12					50									
31						15				2	14				
32						45					23				
33		6				39			5		3				
34															
35															
36															
37							12								
38						31									
39						27			12					12	12
40															
41															
42						47									
43															
44															
45															
46	18			116	52	572		278	153	139	168	21	63	56	362
47								20						19	
48															
49															
50						158	36				53				
51						29					8				
	30	6	14	197	52	2,181	194	381	258	263	532	113	112	265	504

INDUSTRIAL, TECHNICAL

EVENING

III. TABLE R—Attendance, Pupils in the

Evening Schools	Number of pupils in the various branches of instruction								
	Drawing and Painting from Life	Modelling	Wood Carving	Pottery	Cooking	Housekeeping	Home Economics	Home Nursing	Hygiene and Dietetics
1 Barrie								14	
2 Beamsville					4				
3 Belleville					26				
4 Brantford					65		22	20	
5 Brockville	5				61				
6 Chatham					45			20	38
7 Cobourg					31				
8 Collingwood					6				
9 Dundas					9				
10 Espanola									
11 Fairbank					46				
12 Fort William					16		16		
13 Galt									
14 Gananoque									
15 Goderich									
16 Guelph			21		24			14	
17 Hamilton		18			58				
18 Ingersoll			32						
19 Iroquois Falls									
20 Kenora									
21 Kitchener			8		23				
22 Lindsay								30	
23 London	49	49	80		81				
24 Newmarket									
25 Niagara Falls					34	34	34		
26 North Bay					38			11	
27 Orillia									
28 Oshawa									
29 Ottawa					644			80	
30 Owen Sound					77				10
31 Pembroke									
32 Peterborough					29				
33 Port Arthur									
34 Port Hope								15	
35 Preston									
36 Renfrew									
37 St. Catharines									
38 St. Thomas					19	19	19		
39 Sarnia		12	1		61			22	
40 Sault Ste. Marie									
41 South Porcupine									
42 Stratford					41				
43 Sturgeon Falls									
44 Sudbury									
45 Timmins									
46 Toronto	82	44	53	57	1,156		41	221	39
47 Walkerville									
48 Welland					14				
49 Whitby					5				
50 Windsor					37			74	
51 Woodstock					16				7
Totals, 1920-21	136	123	195	57	2,666	53	132	521	94

AND ART SCHOOLS (Continued)

SCHOOLS

Various Branches of Instruction Etc. (Concluded)

Number of pupils in the various branches of instruction

	Sewing and Dress-making	Power Machine Operating	Millinery	Embroidery and Lace Making	French	Spanish	Physical Culture	Radio	Oxy-Acetylene Welding	Structural Drafting and Designing	Basketry	Stenography	Naval Architecture	Railway Car Construction
1	50		14											
2	17													
3	88		22											
4	152						48							
5	73		57				36							
6	38		17					29						
7	32						16							
8	31		33											
9	26													
10					23									
11	47		32											
12	89		59											
13	240													
14	41		26											
15	27	11	7											
16	127		48						9					
17	502		467		33	14			32	29				
18	15		4											
19	11													
20	33											16		
21	187		82								137			
22	43		21				61							
23	383		126	125	23				31					
24	37		9											
25	71		25											
26	67													42
27	34		5											
28	12													
29	1,004		443											
30	140		139	39			70							
31	89		39											
32	115		15											
33	39		48										3	
34	41		11											
35	8		4									9		
36	29			18			28							
37	126		46											
38														
39	249		33	17	11	19								
40	26		9											
41														
42	64													
43														
44	30													
45	12													
46	1,062	66	692	86	284	70	651							
47	67		20											
48	15													
49	38													
50	194		27											
51	70		10											
	5,891	77	2,590	285	374	103	910	29	72	29	137	25	3	42

INDUSTRIAL, TECHNICAL
DAY AND
IV. TABLE S—

Day and Evening Schools	Receipts				
	Legislative Grants	Local Municipal Grants	School Fees	Balances and other sources	Total Receipts
	$ c.	$ c.	$ c.	$ c.	$ c.
1 Almonte	657 86	185 05	7 00	.....	849 91
2 Barrie	.....	1,200 00	220 00	.....	1,420 00
3 Beamsville	382 50	290 95	174 00	124 35	971 80
4 Belleville	2,095 92	1,349 69	269 00	.....	3,714 61
5 Brantford	4,163 11	3,411 30	.....	.....	7,574 41
6 Brockville	1,626 79	3,229 21	.....	.....	4,856 00
7 Chatham	9,444 77	4,050 00	453 00	4,520 94	18,468 71
8 Cobourg	816 23	.....	100 00	173 35	1,089 58
9 Collingwood	1,855 15	1,622 03	321 00	.....	3,798 18
10 Cornwall	697 71	.....	.....	68 34	766 05
11 Dundas	789 80	379 18	182 00	50	1,351 48
12 Espanola	.....	.....	130 00	709 77	839 77
13 Fairbank	.....	5,508 06	266 00	.....	5,774 06
14 Fort William	89,854 12	65,799 10	268 00	.....	155,921 22
15 Galt	1,927 32	324 33	1,170 75	.....	3,422 40
16 Gananoque	423 25	287 58	169 00	.....	879 83
17 Goderich	533 57	178 57	120 00	3 51	835 65
18 Guelph	1,977 32	3,166 54	500 00	.....	5,643 86
19 Haileybury	7,000 00	.....	.....	6,386 65	13,386 65
20 Hamilton	65,474 84	95,628 53	699 25	23,538 13	185,340 75
21 Ingersoll	826 07	200 00	373 20	778 75	2,178 02
22 Iroquois Falls	170 65	800 00	319 50	138 78	1,428 93
23 Kingston	438 75	.....	.....	500 00	938 75
24 Kitchener	3,041 31	2,798 66	1,100 00	2,097 31	9,037 28
25 Lindsay	1,274 48	875 52	622 00	147 68	2,919 68
26 London	16,146 12	53,343 37	3,904 46	14,191 93	87,585 88
27 Midland	202 50	68 50	24 00	.....	295 00
28 Newmarket	441 46	376 75	69 00	.....	887 21
29 Niagara Falls	66,422 30	90,323 15	414 00	14,181 51	171,340 96
30 North Bay	831 77	581 91	140 00	.....	1,553 68
31 Orillia	480 80	892 05	410 00	19 55	1,802 40
32 Oshawa	1,563 04	481 09	606 00	.....	2,650 13
33 Ottawa	47,139 77	71,590 15	3,616 00	6,475 32	128,821 24
34 Owen Sound	3,302 33	2,044 20	.....	100 55	5,447 08
35 Pembroke	965 91	854 90	.....	.....	1,820 81
36 Peterborough	2,273 18	850 00	209 98	773 77	4,106 93
37 Port Arthur	2,046 30	819 23	735 50	.....	3,601 03
38 Port Hope	1,359 52	1,251 98	178 00	.....	2,789 50
39 Preston	.....	332 00	72 64	34 27	438 91
40 Renfrew	492 98	15 14	130 00	26 00	664 12
41 St. Catharines	1,370 99	960 00	355 00	408 39	3,094 38
42 St. Thomas	1,444 07	994 99	400 00	.....	2,839 06
43 Sarnia	3,023 75	65,105 04	1,434 00	910 35	70,473 14
44 Sault Ste. Marie	3,623 41	24,600 08	229 00	112 16	28,564 65
45 South Porcupine	.....	.....	219 00	600 00	819 00
46 Stratford	807 37	.....	.....	688 08	1,495 45
47 Sturgeon Falls	494 86	.....	46 00	200 00	740 86
48 Sudbury	71,113 03	49,282 42	460 00	4,875 90	125,731 35
49 Timmins	1,057 76	.....	274 45	884 92	2,217 13
50 Toronto	58,510 85	239,833 00	23,591 50	14,683 45	336,618 80
51 Walkerville	14,193 91	18,500 00	1,170 00	5 20	33,869 11
52 Welland	1,451 39	1,000 00	220 00	.....	2,671 39
53 Whitby	605 38	360 29	.....	.....	965 67
54 Windsor	13,184 84	12,637 00	3,001 75	1,522 34	30,345 93
55 Woodstock	999 93	533 18	172 50	131 54	1,837 15
1 Totals, 1920	511,021 04	828,914 72	49,546 48	100,013 29	1,489,495 53
2 Totals, 1919	140,294 41	340,914 50	38,171 04	312,754 45	832,134 40
3 Increases	370,726 63	488,000 22	11,375 44	.....	657,361 13
4 Decreases	.....	.....	.....	212,741 16	.....
5 Percentages	34.31	55.65	3.32	6.71	.....

AND ART SCHOOLS
EVENING SCHOOLS
Financial Statement

	Expenditure					
	Teachers' Salaries	Buildings, sites and all permanent improvements	Repairs to school accommodations	Library, maps and charts, all apparatus and equipment	School books, stationery, prizes, fuel, examinations and all other expenses	Total expenditure
	$ c.	$ c.	c.	$ c.	$ c.	$ c.
1	302 00			58 35	489 56	849 91
2	605 00			726 81	86 30	1,418 11
3	807 00			164 80		971 80
4	2,445 00		25 82	126 82	1,116 97	3,714 61
5	5,719 16			68 24	1,787 01	7,574 41
6	4,139 00			36 40	680 60	4,856 00
7	6,710 43			6,505 54	2,575 27	15,791 24
8	667 00			297 34	96 23	1,060 57
9	2,223 67	240 00	15 34	770 51	548 66	3,798 18
10	564 00				202 05	766 05
11	1,015 99			144 40	189 09	1,349 48
12	569 00			270 77		839 77
13	840 00	2,638 00		2,168 06	128 00	5,774 06
14	2,005 00	143,184 70		10,521 52	210 00	155,921 22
15	2,756 34	150 00		229 91	286 15	3,422 40
16	740 00			88 33	51 50	879 83
17	680 00	71 00			84 65	835 65
18	2,904 00			2,355 61	384 25	5,643 86
19	7,281 00	1,471 17			1,857 90	10,610 07
20	61,207 94	1,481 58	972 15	16,661 28	44,277 12	124,600 07
21	1,306 00	23 50		416 11	380 33	2,125 94
22	426 00			421 52	564 26	1,411 78
23	825 00		26 45		85 73	937 18
24	5,440 90			277 40	3,318 98	9,037 28
25	2,309 00	361 07			233 50	2,903 57
26	34,968 00	2,339 45	1,072 37	5,191 42	37,944 24	81,515 48
27	270 00	25 00				295 00
28	691 00				196 21	887 21
29	2,409 59	146,820 28		17,193 86	4,917 23	171,340 96
30	1,341 00			60 69	151 99	1,553 68
31	979 50	133 69			689 21	1,802 40
32	1,826 00	217 50		310 63	296 00	2,650 13
33	37,071 00	42,882 12		25,259 44	9,040 32	114,252 88
34	3,949 50	96 40		449 64	951 54	5,447 08
35	1,598 00			56 82	165 99	1,820 81
36	2,784 00			33 77	520 45	3,338 22
37	2,908 50			560 00	132 53	3,601 03
38	1,854 00	593 74		219 34	122 42	2,789 50
39	332 00	16 25		77 53	13 13	438 91
40	520 00			124 62	19 50	664 12
41	2,152 00			26 27	224 89	2,403 16
42	2,254 66	584 40				2,839 06
43	4,200 34	47,374 52		463 78	12,174 57	64,213 21
44	4,350 06	23,500 00			714 59	28,564 65
45	633 00				136 73	769 73
46	1,325 50				169 95	1,495 45
47	598 06	53 00		46 30	25 02	722 32
48	8,241 00	97,951 06		1,053 45	1,355 40	108,600 91
49	1,236 00				237 21	1,473 21
50	203,315 77	611 04	7,244 10	17,769 81	80,923 50	309,864 22
51	3,268 75			22,612 08	7,822 10	33,702 93
52	1,540 00			1,017 10	114 29	2,671 39
53	723 00			38 67	204 00	965 67
54	12,748 92	2,100 00		9,768 10	3,674 51	28,291 53
55	1,324 50			385 65	127 00	1,837 15
1	455,902 02	514,919 47	9,356 23	145,028 69	222,698 63	1,347,905 04
2	324,193 44	117,170 54	13,465 30	60,958 81	143,284 73	659,072 82
3	131,708 58	397,748 93		84,069 88	79,413 90	688,832 22
4			4,109 07			
	33.82	38.20	.69	10.76	16.52	

TABLE T—PROTESTANT SEPARATE SCHOOLS

—	No. 1 Grattan	No. 2 Hagarty	L'Original Village	Penetanguishene Town	Totals 1920
Number of Schools	1	1	1	2	5
	$ c.	$ c.	$ c.	$ c.	$ c.
Receipts:					
Balances from 1919	26 99	448 16	66 91	310 32	852 38
Government grants	139 15	716 32	9 31	440 20	1,304 98
Municipal grants	18 14	10 92	.....	.....	29 06
Municipal assessments	1,372 27	300 00	802 63	10,000 00	12,474 90
Other sources	851 00	.....	293 64	.....	1,144 64
Totals	2,407 55	1,475 40	1,172 49	10,750 52	15,805 96
Expenditure:					
Teachers' salaries	659 50	716 00	702 01	7,457 60	9,535 11
School sites and buildings	130 60	.....	20 95	57 60	209 15
Libraries, maps, apparatus, etc	23 22	.....	.....	60 50	83 72
Other expenses	1,390 62	245 80	318 22	3,070 02	5,024 66
Totals	2,203 94	961 80	1,041 18	10,645 72	14,852 64
Balances on hand	203 61	513 60	131 31	104 80	953 32
Teachers:					
Male	.....	.....	.....	1	1
Female	1	1	1	7	10
Certificates	II	Dist.	II	1 I; 7 II	1 I; 9 II; 1 Dist.
Salaries	$700	$900	$750	Male, $1,500 Av. Fem., $829	1 male, $1,500 Av. Fem., $815
Pupils:					
Total number attending	25	41	22	324	412
Boys	14	20	12	157	203
Girls	11	21	10	167	209
Average attendance	14	21	12	213	260
No. in Primer	7	19	4	69	99
" 1st Book	4	5	2	34	45
" 2nd "	4	8	5	75	92
" 3rd "	6	3	6	63	78
" 4th "	2	6	5	83	96
" Beyond 4th Book	2	.....	.....	.....	2
" Art	25	41	22	324	412
" Geography	25	41	18	255	339
" Music	25	41	.....	324	390
" Literature	25	41	18	324	408
" Composition	25	41	22	324	412
" Grammar	4	6	5	146	161
" English History	14	17	16	83	130
" Canadian History	14	17	16	59	106
" Physiology and Hygiene	25	41	22	324	412
" Nature Study	25	41	22	324	412
" Physical Culture	25	41	22	324	412
" Bookkeeping	2	.....	.....	.....	2
" Arithmetic and Mensuration	2	.....	.....	.....	2
" Algebra	2	.....	.....	.....	2
" Elementary Science	2	.....	.....	.....	2
" Agriculture	9	.....	.....	25	34
Brick or frame school house	Brick	Frame	Brick	1 Br.; 1 Fr.	3 Br.; 2 Fr.
Number of maps	8	9	7	20	44
Number of globes	1	1	1	2	5

TABLE U—REPORT ON NIGHT SCHOOLS

I. Night Public Schools

	Number of Schools	Teachers	Pupils Enrolled	Average Daily Attendance
Kitchener	1	2	84	61
Toronto	11	35	1,414	714
Wallaceburg	1	1	15	6
York Tp., S. S. No. 28	1	1	32	28
York Tp., S. S. No. 28a	1	1	24	16
Totals, 1920-21	15	40	1,569	825

II. Night High Schools

School	Number of Schools	Teachers	Pupils Enrolled	Average Daily Attendance
Brantford	1	4	10	9
Fort William	1	3	44	28
Hamilton	1	9	213	29
London	1	8	89	44
Tillsonburg	1	1	3	2
Toronto	2	33	727	164
Totals 1920-21	7	58	1,086	276

III. Night Commercial High Schools

School	Number of Schools	Teachers	Pupils Enrolled	Aggregate number of student hours
Belleville	1	6	150	86,430
Brantford	1	4	124	3,238
Brockville	1	3	62	1,723
Cobourg	1		19	229
Collingwood	1	2	70	2,980
Dundas	1	1	37	1,592
Fort William	1	3	128	1,582
Gananoque	1	2	43	1,038
Guelph	1	2	70	2,130
Kitchener	1	2	50	2,318
Lindsay	1	2	19	668
London	1	5	127	7 986
Newmarket	1	1	13	252
Niagara Falls	1	4	105	1,412
Ottawa	1	6	204	8,465
Port Arthur	1	3	72	1 113
St. Catharines	1	2	99	1,804
St. Thomas	1	2	48	1,854
Sarnia	1	3	66	2,214
Stratford	1	2	50	3,900
Toronto	1	63	2,458	90,732
Whitby	1	1	12	124
Windsor	1	8	272	9,758
Woodstock	1	1	27	824
Totals, 1920-21	24	130	4,32	234,366

TABLE V—GENERAL

A General Statistical Abstract, exhibiting the comparative state and progress of Industrial and Technical Schools from the year 1867

No.	Subjects Compared.	1867	1872	1877	1882	1887
1	Population	.....	1,620,851	.....	1,926,922	.....
2	School population between the ages of five and sixteen years up to 1882, five to twenty-one subsequently	447,726	495,756	494,804	483,817	611,212
3	High Schools (including Collegiate Institutes)	102	104	104	104	112
4	Continuation Schools	.....	.....	.....	.....	.....
5	Public Schools in operation	4,261	4,490	4,955	5,013	5,277
6	Roman Catholic Separate Schools	161	171	185	190	229
7	Grand total of above schools in operation	4,524	4,765	5,244	5,307	5,618
8	Pupils attending High Schools (including Collegiate Institutes and Night High Schools)	5,696	7,968	9,229	12,348	17,459
9	Pupils attending Continuation Schools	.....	.....	.....	.....	.....
10	Pupils attending Day Industrial, Technical and Art Schools	.....	.....	.....	.....	.....
11	Pupils attending Night Industrial, Technical and Art Schools	.....	.....	.....	.....	.....
12	Pupils attending Public Schools (including Kindergarten and Night Public Schools)	382,719	433,256	465,908	445,364	462,839
13	Pupils attending Roman Catholic Separate Schools	18,924	21,406	24,952	26,148	30,373
14	Grand total of students and pupils attending High, Continuation, Industrial and Technical, Public and Separate Schools	407,339	462,630	500,089	483,860	510,671
15	Amount paid for the salaries of Public and Separate School teachers	$1,093,517	1,371,594	2,038,099	2,144,449	2,458,540
16	Total amount paid for Public and Separate School purposes	$1,473,189	2,207,364	3,073,489	3,026,975	3,742,104
17	Amount paid for Continuation School teachers' salaries	$.....	.....	.....	.....	.....
18	Total amount paid for Continuation School purposes	$.....	.....	.....	.....	.....
19	Amount paid for High School (and Collegiate Institute) teachers' salaries	$ 94,820	141,812	211,607	253,864	327,452
20	Total amount paid for High School and Collegiate Institute purposes	$ 124,181	210,005	343,710	343,720	495,612
21	Amount paid for Industrial, Technical and Art School Teachers' Salaries	$.....	.....	.....	.....	.....
22	Total amount paid for Industrial, Technical and Art School purposes	$.....	.....	.....	.....	.....
23	Grand total paid for educational purposes as above	$1,597,370	2,417,369	3,417,199	3,370,695	4,237,716
24	Male Teachers in Public and Separate Schools	2,849	2,626	3,020	3,062	2,718
25	Female Teachers in Public and Separate Schools	2,041	2,850	3,448	3,795	4,876
26	Total Public and Separate School Teachers	4,890	5,476	6,468	6,875	7,594
27	Continuation School Teachers	.....	.....	.....	.....	.....
28	High School and Collegiate Institute Teachers	159	239	280	332	398
29	Day Industrial, Technical and Art School Teachers	.....	.....	.....	.....	.....
30	Number of all teachers, as specified above	5,049	5,715	6,748	7,189	7,992

* Included in Public and Separate School attendances. † Included with year ended six months after

STATISTICAL ABSTRACT

Education in Ontario, as connected with Public, Separate, Continuation, High, to 1920, compiled from Returns to the Department of Education

No.	1892	1897	1902	1907	1912	1917	1919	1920
1	2,114,321	.....	2,167,938	.....	‡2,523,358	.....	.....	.....
2	595,238	590,055	584,512	590,285	609,127	628,996	652,264	667,379
3	128	130	134	143	148	162	167	168
4	.....	44	65	107	138	137	138	144
5	5,577	5,574	5,671	5,819	5,939	6,103	6,179	6,207
6	312	340	391	449	513	548	559	594
7	6,017	6,088	6,261	6,518	6,738	6,950	7,043	7,113
8	22,837	24,390	24,472	30,331	32,608	¶33,024	¶38,078	¶39,539
9	.....	*1,618	*2,190	*4,744	6,094	¶5,104	¶5,126	¶5,823
10	.....	.....	.....	.....	.....	¶3,674	¶4,790	¶4,526
11	.....	.....	.....	.....	.....	¶14,597	¶26,527	¶27,297
12	458,553	453,256	420,094	413,510	429,030	458,436	472,572	489,660
13	37,466	41,620	45,964	51,502	61,297	70,048	74,833	76,881
14	518,856	519,266	490,530	495,343	529,029	584,883	621,926	643,726
15	2,752,629	2,886,061	3,198,132	4,389,524	6,109,547	8,398,450	10,160,399	13,070,038
16	4,053,918	4,215,670	4,825,160	7,556,179	11,273,960	14,111,835	18,851,627	25,216,512
17	.....	Included with No. 15	Included with No. 15	Included with No. 15	202,875	228,362	253,654	317,602
18	.....	Included with No. 16	Included with No. 16	Included with No. 16	265,087	324,621	388,701	473,085
19	472,029	532,837	547,402	783,782	1,232,537	1,554,049	1,801,602	2,269,387
20	696,114	715,976	769,680	1,213,697	1,953,061	2,418,975	2,748,042	3,588,933
21	.....	.....	.....	.....	.....	.....	324,193	455,902
22	.....	.....	.....	.....	.....	.....	659,073	1,347,905
23	4,750,032	4,931,646	5,594,840	8,769,876	13,492,108	16,855,431	22,647,443	30,626,435
24	2,770	2,784	2,311	1,813	1,511	1,317	1,328	1,506
25	5,710	6,344	7,320	8,387	9,617	11,445	12,061	12,363
26	8,480	9,128	9,631	10,200	11,128	12,762	13,389	13,869
27	.....	†44	†86	†140	226	241	244	255
28	522	579	593	750	917	1,051	1,168	1,207
29	.....	.....	.....	.....	.....	132	177	191
	9,002	9,707	10,224	10,950	12,271	14 186	14,978	15,522

Public and Separate Schools teachers. ‡Census of 1911. ¶Figures for the School the calendar year specified

FREE PUBLIC LIBRARIES

Statistics, 1920, showing Legislative Grants paid in 1921

No.	Library	Reading Room	Population	Total Expenditure	Volumes in Library	Circulation 1920	Legislative Grant paid in 1920	Amount expended on Books in 1919
				$ c.			$ c.	$ c.
1	Acton	.....	2,000	526 65	4,118	10,146	86 12	190 75
2	Ailsa Craig	R	590	282 28	3,440	5,380	99 27	127 92
3	Amherstburg	R	3,124	1,289 22	4,502	8,877	114 35	237 27
4	Arnprior	.....	4,102	472 28	4,261	6,844	88 14	256 98
5	Arthur	R	1,083	275 75	3,900	6,315	65 94	111 28
6	Aurora	R	2,205	864 41	3,537	10,553	44 39	40 16
7	Aylmer	R	2,247	1,113 81	9,017	17,950	233 75	304 87
8	Ayr	R	802	569 63	4,210	7,301	99 70	97 55
9	Barrie	R	6,875	3,104 73	7,222	37,474	260 00	452 64
10	Beamsville	R	1,168	582 46	5,278	10,535	71 52	95 20
11	Beaverton	R	1,100	334 61	1,992	1,173	70 20	46 15
12	Beeton	.....	573	151 56	2,563	2,202	23 31	40 20
13	Belleville	R	12,240	6,017 75	11,082	47,232	260 00	1,699 05
14	Belmont	.....	600	100 00	1,087	1,466	25 00	.....
15	Bothwell	.....	675	222 33	3,114	6,691	44 46	86 11
16	Bracebridge	R	2,424	1,390 69	5,712	14,938	175 04	225 19
17	Brampton	R	4,500	1,836 41	7,519	23,833	246 57	297 74
18	Brantford	R	32,786	11,632 06	31,036	119,131	260 00	2,102 98
19	Brighton	R	1,400	360 08	4,180	3,796	44 91	62 70
20	Brockville	R	9,254	2,515 00	15,789	21,769	236 47	489 33
21	Brussels	.....	875	710 60	4,735	5,114	57 82	59 80
22	Burk's Falls	.....	No annual report for 1920					
23	Campbellford	R	3,100	1,929 65	4,440	20,950	218 81	455 89
24	Cardinal	R	1,200	250 10	2,760	3,074	51 21	56 15
25	Carleton Place	R	3,786	680 36	7,624	15,433	136 89	232 06
26	Cayuga	.....	800	137 47	1,937	793	17 73	21 57
27	Chatham	R	15,182	6,309 09	12,160	67,258	260 00	1,616 43
28	Chesley	R	1,721	487 25	3,228	5,316	88 88	119 06
29	Clifford	.....	600	186 79	4,353	5,059	48 24	76 52
30	Clinton	R	2,000	1,305 08	7,921	18,269	254 33	388 66
31	Collingwood	R	6,787	3,882 09	10,314	16,899	260 00	381 03
32	Cornwall	R	7,227	1,705 78	6,175	13,047	175 72	328 74
33	Delhi	R	667	373 65	2,472	2,387	62 05	86 49
34	Deseronto	.....	2,017	699 00	Library burned, March, 1920			
35	Drayton	R	625	370 44	3,756	7,193	119 84	167 67
36	Dresden	R	1,500	758 92	1,959	2,767	26 76	66 66
37	Dundas	R	5,056	2,984 18	8,658	43,246	260 00	745 36
38	Durham	R	1,585	786 43	3,774	6,864	38 67	61 98
39	Elmira	R	2,097	919 34	5,444	10,331	172 54	302 66
40	Elora	R	1,205	811 06	8,664	9,094	117 32	167 30
41	Erin	.....	500	173 46	3,265	7,000	56 47	88 91
42	Essex	R	1,850	893 01	4,069	6,536	129 46	230 37
43	Exeter	R	1,448	1,051 94	5,099	9,702	125 69	210 66
44	Fergus	R	1,800	2,461 01	4,877	12,153	93 72	120 22
45	Forest	R	1,386	653 40	4,275	14,882	74 85	152 50
46	Fort Frances	R	2,849	1,915 75	3,721	9,308	169 63	353 90
47	Fort William	R	19,720	22,213 60	32,147	117,460	260 00	4,683 55
48	Fort William, Br.	R	.....	3,263 59	.....	31,952	260 00	2,291 75
49	Galt	R	13,600	5,734 94	11,165	45,496	260 00	938 81
50	Gananoque	R	3,604	1,277 51	5,933	18,293	251 65	467 04
51	Garden Island	.....	80	33 00	5,000	500	10 00	.....
52	Georgetown	R	2,123	862 41	4,339	11,474	120 33	220 09
53	Glencoe	.....	No annual report for 1920					
54	Goderich	R	4,700	1,928 51	6,099	19,707	260 00	644 30
55	Grand Valley	R	590	803 30	3,461	6,357	90 54	199 78
56	Gravenhurst	.....	1,502	126 40	2,629	1,659	35 76	44 75
57	Grimsby	R	2,000	1,855 62	4,289	18,284	187 69	295 25
58	Guelph	R	17,922	7,021 62	19,932	83,019	260 00	980 33

FREE PUBLIC LIBRARIES (Continued)

Statistics, 1920, showing Legislative Grants paid in 1921

No.	Library	Reading Room	Population	Total Expenditure	Volumes in Library	Circulation	Legislative Grant paid in 1920	Amount expended on Books in 1919
				$ c.			$ c.	$ c.
59	Hagersville	R	1,072	572 63	2,377	1,308	111 21	144 90
60	Hamilton	R	114,766	78,675 46	61,901	453,487	260 00	6,600 27
61	Hamilton Branch	R	.....	2,865 31	9,476	64,280	260 00	2,411 10
62	Hanover	R	3,225	736 64	3,651	13,687	119 54	182 57
63	Harriston	R	1,400	1,103 41	6,558	14,360	173 27	245 74
64	Hensall	.....	800	323 67	2,156	4,498	88 04	151 75
65	Hespeler	R	3,059	1,234 64	5,390	13,823	231 03	270 01
66	Ingersoll	R	5,400	1,940 61	6,383	24,153	159 00	322 05
67	Kemptville	R	1,200	504 51	3,905	8,685	111 01	156 10
68	Kenora	R	5,000	3,563 16	4,279	17,517	152 94	277 68
69	Kincardine	R	2,200	653 94	4,571	4,395	67 03	91 25
70	Kingston	R	22,368	5,815 80	13,396	80,513	260 00	1,741 27
71	Kingsville	R	1,800	620 26	2,310	9,203	100 88	168 12
72	Kitchener	R	23,027	9,267 99	16,215	73,020	260 00	1,608 28
73	Lakefield	R	1,135	835 93	1,245	6,406	253 77	655 61
74	Lanark	.....	No annual report for 1920					
75	Lancaster	....	574	242 27	4,000	2,388	54 59	84 30
76	Leamington	R	4,360	1,502 09	6,097	22,824	166 71	355 79
77	Lindsay	R	7,841	3,216 57	8,233	24,454	260 00	648 41
78	Listowel	R	2,500	1,249 36	5,380	10,355	178 61	309 84
79	Little Britain	R	200	166 20	2,355	2,003	56 55	.....
80	London	R	59,281	18,565 73	42,729	234,867	260 00	3,370 12
81	London, East	R	.....	2,459 80	6,053	44,512	260 00	831 65
82	London, South	.....	.....	1,154 65	2,649	18,352	200 00	602 62
83	London, Southeast	.....	.....	Opened December 5th, 1921				
84	Lucknow	R	990	1,211 91	3,700	5,120	148 36	337 35
85	Markdale	R	1,000	720 88	3,436	6,534	69 05	81 23
86	Merrickville	.....	850	261 95	3,127	6,111	45 41	96 70
87	Merritton	.....	2,480	262 31	2,713	8,015	54 45	97 88
88	Midland	R	6,532	2,308 55	8,162	37,434	244 00	467 82
89	Millbrook	R	740	350 08	2,903	7,489	86 21	108 33
90	Milverton	R	1,040	710 23	3,274	5,105	78 44	179 84
91	Mimico	R	3,750	2,141 60	3,404	17,875	147 42	287 58
92	Mitchell	R	1,656	829 89	5,604	5,188	65 79	106 96
93	Mount Forest	R	1,837	925 63	4,437	10,548	64 25	99 15
94	New Hamburg	R	1,370	618 05	3,001	7,066	78 59	95 93
95	New Liskeard	R	2,000	2,146 24	5,032	10,503	175 85	366 72
96	Newmarket	R	3,487	748 37	4,654	10,090	140 48	223 32
97	Niagara Falls	R	14,805	6,690 51	17,477	65,363	260 00	1,941 79
98	North Bay	R	10,183	3,918 81	6,933	31,839	260 00	542 08
99	Norwich	R	1,270	956 28	3,859	11,061	175 29	375 65
100	Oakwood	R	250	172 19	2,162	1,927	57 07	63 58
101	Orangeville	R	2,186	1,689 98	7,045	19,677	194 72	310 28
102	Orillia	R	7,800	2,924 71	8,150	28,247	260 00	549 48
103	Oshawa	R	10,500	2,125 07	6,144	31,964	176 05	299 56
104	Ottawa	R	110,738	45,302 53	73,162	261,887	260 00	7,780 97
105	Ottawa, South	R	.....	2,136 05	2,950	14,140	260 00	551 29
106	Ottawa West	R	.....	3,706 63	5,326	24,876	260 00	711 66
107	Otterville	R	600	189 94	2,122	4,879	70 48	115 47
108	Owen Sound	R	12,218	3,771 74	8,873	45,842	243 87	496 22
109	Paisley	R	751	385 29	5,751	8,486	90 73	122 69
110	Palmerston	R	2,000	1,616 05	3,136	7,092	57 12	157 61
111	Paris	R	4,375	1,572 55	12,318	31,059	226 70	272 76
112	Park Hill	R	1,400	901 60	2,689	4,030	61 34	83 16
113	Parry Sound	.....	3,825	1,203 54	3,825	21,876	130 86	421 31
114	Pembroke	R	7,674	3,082 52	6,927	22,768	260 00	783 44
115	Penetanguishene	R	3,850	1,548 12	6,697	13,897	206 48	309 11

FREE PUBLIC LIBRARIES (Continued)

Statistics, 1920, showing Legislative Grants paid in 1921

No.	Library	Reading Room	Population	Total Expenditure	Volumes in Library	Circulation	Legislative Grant paid in 1921	Amount expended on Books in 1919
				$ c.			$ c.	$ c.
116	Perth	R	3,675	1,725 92	4,450	17,609	96 51	195 27
117	Peterborough	R	21,790	7,913 64	17,608	72,627	260 00	1,404 34
118	Picton	R	3,165	1,964 17	7,811	24,890	260 00	405 41
119	Port Arthur	R	15,201	11,499 13	16,921	89,790	260 00	1,884 38
120	Port Carling	R	400	391 01	1,948	2,840	84 03	84 85
121	Port Colborne	R	3,225	871 21	2,533	11,462	143 86	244 30
122	Port Elgin	R	1,500	885 02	5,234	14,084	104 75	238 00
123	Port Hope	R	4,394	1,547 19	7,640	24,374	86 84	155 90
124	Port Rowan	.....	626	224 16	1,920	2,195	37 40	34 80
125	Prescott	R	2,774	700 51	7,019	17,456	122 93	200 80
126	Preston	R	5,355	2,130 41	9,082	30,785	181 52	323 26
127	Renfrew	R	5,600	1,895 68	4,362	31,567	253 50	670 73
128	Richmond Hill	R	1,003	316 83	4,673	7,409	75 02	86 83
129	Ridgeway	.....	750	350 93	2,674	3,213	53 28	143 23
130	St. Catharines	R	19,860	8,031 96	13,333	66,016	260 00	1,626 34
131	St. Mary's	R	4,004	1,287 90	9,727	21,403	101 86	252 25
132	St. Thomas	R	17,850	6,565 75	17,384	84,324	260 00	1,209 00
133	Sarnia	R	13,870	6,106 28	13,522	52,713	260 00	1,740 69
134	Sault Ste. Marie	R	21,500	9,826 60	10,235	73,491	260 00	2,043 20
135	Sault Ste. Marie, W	R	.....	1,774 78	1,698	23,121	260 00	720 91
136	Schreiber	R	1,402	230 58	1,678	6,432	39 91	36 95
137	Seaforth	R	2,020	1,182 44	5,813	17,803	257 65	433 05
138	Shelburne	R	1,100	774 83	4,655	7,043	76 02	188 05
139	Simcoe	R	4,014	4,213 07	10,845	26,274	257 91	420 39
140	Smith's Falls	R	6,665	3,409 82	6,604	20,472	206 29	283 51
141	South River	.....	600	108 52	2,259	1,420	18 81	35 77
142	Springfield	.....	429	145 79	1,671	2,253	26 23	63 60
143	Stayner	.....	870	169 57	2,368	1,211	33 57	63 77
144	Stirling	R	850	859 21	2,609	5,958	138 58	250 69
145	Stouffville	R	1,025	655 57	6,128	12,641	107 54	160 73
146	Stratford	R	18,871	4,389 19	15,405	64,397	260 00	1,214 61
147	Strathroy	R	2,654	835 02	9,383	30,507	108 26	156 01
148	Streetsville	R	475	335 34	2,949	5,621	63 71	49 45
149	Sudbury	R	9,098	1,680 67	2,626	15,588	132 79	308 78
150	Sundridge	.....	465	52 58	1,038	1,683	16 67	21 88
151	Sutton West	R	689	248 95	1,949	4,270	61 88	106 37
152	Tara	R	560	295 50	2,025	3,722	81 22	73 28
153	Tavistock	R	990	817 85	4,511	5,824	108 99	190 31
154	Teeswater	R	900	810 21	5,205	5,815	75 70	118 95
155	Thorold	R	5,500	1,255 31	6,671	7,153	174 70	209 72
156	Tilbury	.....	No annual report for 1920					
157	Tillsonburg	R	3,200	1,718 74	4,725	26,129	260 00	440 34

FREE PUBLIC LIBRARIES (Concluded)

Statistics, 1920, showing Legislative Grants paid in 1921

No.	Library	Reading Room	Population	Total Expenditure	Volumes in Library	Circulation	Legislative Grant paid in 1920	Amount expended on Books in 1919
				$ c.			$ c.	$ c.
	Toronto:—							
158	Beaches	R	522,666	11,522 09	10,910	128,730	253 60	1,199 72
159	Church	R	.....	23,467 30	57,036	92,272	260 00	970 22
160	College	R	.....	101,120 42	135,452	543,108	260 00	12,463 30
161	Deer Park	R	.....	9,804 47	11,169	107,381	255 00	1,151 27
162	Dovercourt	R	.....	24,337 54	20,081	231,843	260 00	2,431 37
163	Earlescourt	R	.....	8,415 19	9,651	113,967	241 35	1,226 92
164	Eastern	R	.....	4,520 43	6,029	25,592	228 60	637 02
165	High Park	R	.....	12,719 36	14,177	160,875	253 60	1,522 07
166	Municipal	R	.....	2,139 59	1,460	8,562	223 12	345 00
167	Northern	R	.....	5,038 13	7,856	36,160	234 60	500 17
168	Queen & Lisgar	R	.....	9,836 56	17,037	101,417	255 00	960 87
169	Riverdale	R	.....	17,182 69	18,930	184,794	260 00	1,691 02
170	Western	R	.....	11,051 39	14,053	112,043	255 00	1,269 42
171	Wychwood	R	.....	12,136 50	11,216	94,206	236 60	1,020 37
172	Yorkville	R	.....	8,171 28	15,012	78,481	255 00	1,156 37
173	Trenton	R	6,000	2,273 30	2,246	8,357	238 00	1,170 30
174	Uxbridge	R	1,346	943 46	6,894	10,814	87 09	178 93
175	Walkerton	R	2,500	1,204 47	4,674	11,440	141 85	122 39
176	Walkerville	R	7,469	6,143 53	9,887	46,860	260 00	1,041 65
177	Wallaceburg	R	4,119	2,980 13	4,574	28,848	260 00	528 91
178	Waterford	.....	1,085	350 52	1,332	720	133 63	275 08
179	Waterloo	R	5,744	2,697 11	12,278	22,055	260 00	434 72
180	Watford	R	1,033	654 85	4,619	8,500	79 35	114 88
181	Weston	R	2,595	1,791 62	5,092	23,772	230 80	378 61
182	Whitby	R	3,571	1,264 82	4,041	13,291	157 50	241 02
183	Windsor	R	37,170	15,596 75	30,886	120,526	260 00	3,674 61
184	Wingham	R	2,240	992 38	7,135	8,980	253 96	398 16
185	Woodstock	R	10,333	3,794 50	12,606	49,503	260 00	540 10
186	Wroxeter	.....	365	63 62	5,759	2,097	20 00	9 60
	Totals	.....	1,523,873	738,010 33	1,537,517	6,316,340	28,816 51	120,131 43

ASSOCIATION PUBLIC LIBRARIES

Statistics, 1920, showing Legislative Grants paid 1921

No.	Library	Reading Room	Population	Total Expenditure	Volumes in Library	Circulation	Legislative Grant paid in 1921	Amount expended on Books in 1920
				$ c.			$ c.	$ c.
1	Admaston		Rural	12 00	1,524	923	5 00	
2	Agincourt		400	364 69	1,470	5,522	183 99	322 05
3	Allenford		Organized February 10th, 1921					
4	Alliston		1,264	745 81	492	5,075	148 13	464 77
5	Alma		No annual report for 1920					
6	Almonte	R	2,700	170 47	4,310	8,002	58 81	40 78
7	Alton		419	128 48	5,183	3,115	29 71	63 59
8	Angus		400	94 35	1,152	2,054	30 76	44 35
9	Akrona		418	167 24	2,930	1,690	23 38	34 52
10	Assiginack		No annual report for 1920					
	Manitowaning, P.O							
11	Athens		775	178 75	1,923	2,792	39 72	138 66
12	Atwood		600	72 85	1,265	1,158	19 15	22 84
13	Auburn	R	250	89 25	1,653	1,557	25 25	
14	Badjuros		Rural	71 99	743	457	13 52	48 10
15	Bancroft		800	228 95	169	126	121 96	203 95
16	Bath	R	380	219 69	1,172	4,230	40 75	
17	Bayfield		400	179 83	898	3,360	65 10	100 21
18	Bayham		Rural	15 00	1,105	331	10 00	
19	Baysville		168	85 38	1,068	1,925	17 69	54 81
20	Beachville		500	86 42	1,736	2,507	15 00	50 73
21	Beechwood		Rural	193 70	1,425	2,056	85 53	137 15
22	Belwood		350	131 90	2,710	1,282	15 00	
23	Bircheliff		No annual report for 1920					
24	Blenheim	R	1,650	562 84	5,465	12,263	72 88	98 72
25	Bloomfield		600	45 50	1,513	221		
26	Blyth		670	101 31	2,544	6,256	25 91	53 81
27	Bobcaygeon	R	864	332 95	3,537	3,698	103 70	128 83
28	Bolton		650	181 45	2,205	3,000	36 09	85 10
29	Bowmanville	R	3,500	800 19	5,094	12,057	160 49	234 99
30	Bridgeburg		1,958	278 97	2,751	4,794	38 16	133 25
31	Bridgen		No annual report for 1920					
32	Brooklin		Rural	67 28	3,265	2,684	15 00	2 90
33	Brownsville		250	244 68	1,503	3,801	59 25	156 43
34	Brucefield		200	87 59	1,981	1,617	28 63	64 70
35	Burgessville		200	198 12	1,061	1,970	50 21	92 18
36	Burlington	R	2,500	824 82	4,731	5,342	72 20	217 72
37	Burnstown		No annual report for 1920					
38	Caledon		500	288 65	3,247	1,668	71 76	110 16
39	Cambray		Rural	208 52	2,436	1,031	74 14	157 32
40	Camden, East		Rural	121 06	2,004	386	59 34	90 94
41	Canfield		165	90 89	1,077	1,303	23 05	48 00
42	Cannington	R	1,000	201 83	4,248	4,248	34 97	45 65
43	Capreol		No annual report for 1920					
44	Cargill		250	266 78	3,451	5,019	106 73	177 04
45	Chalk River		Organized September 23rd, 1921					
46	Chatsworth		303	172 95	1,693	830	24 19	35 38
47	Cheapside		500	79 90	2,521	1,000	26 96	66 20
48	Chesterville		949	379 85	541	913	66 53	129 75
49	Claremont		325	152 79	2,805	1,496	54 37	100 61
50	Clarksburg	R	600	396 81	2,529	4,732	118 76	192 31
51	Clarkson		200	138 92	343	1,614	43 27	80 00
52	Claude		Rural	68 36	3,565	1,143	41 38	63 11
53	Cobourg	R	4,800	783 31	5,566	18,553	109 83	220 62
54	Cochrane		Organized March 7th, 1921					
55	Colborne	R	1,000	105 00	2,209	751	35 56	24 50
56	Coldstream		100	77 47	2,086	2,193	15 16	16 07
57	Coldwater		600	175 86	2,266	8,353	19 31	92 60
58	Comber	R	600	237 79	2,829	5,267	78 01	58 45
59	Cookstown		500	26 18	1,813	340	10 00	
60	Copleston		No annual report for 1920					
61	Copper Cliff		3,412	1,137 06	2,571	16,425	200 00	558 71

ASSOCIATION PUBLIC LIBRARIES (Continued)

Statistics, 1920, showing Legislative Grants paid in 1921

No.	Library	Reading Room	Population	Total Expenditure	Volumes in Library	Circulation	Legislative Grant paid in 1920	Amount expended on Books in 1920
				$ c.			$ c.	$ c.
62	Craighurst		Organized January 25th, 1921					
63	Creemore		653	62 60	507	286	15 00	.....
64	Delaware	.....	Organized, January 10th, 1921					
65	Delta	.....	400	156 29	1,133	1,431	52 46	99 58
66	Depot Harbour	.....	800	198 34	1,142	1,965	64 77	156 78
67	Don	.....	250	147 90	1,809	786	50 74	101 95
68	Dorchester	.....	500	158 29	1,866	2,366	43 43	106 64
69	Drumbo	.....	400	153 27	2,944	2,594	52 75	109 97
70	Duart	.....	300	6 00	2,098	522	25 00	.....
71	Dundalk	.....	750	197 37	3,055	3,048	20 30	102 27
72	Dungannon	.....	Rural	135 55	2,617	3,156	42 12	78 25
73	Dunnville	.....	3,500	814 65	5,829	14,370	200 00	515 94
74	Dutton	R	1,000	233 43	2,887	3,555	43 57	73 39
75	East Linton	.....	200	196 59	317	20	20 11	109 15
76	Elmvale	.....	320	162 39	2,571	4,141	74 34	118 69
77	Elmwood	.....	Rural	130 22	1,654	3,427	42 34	67 55
78	Embro	R	500	257 98	5,069	5,250	56 71	131 53
79	Emo	.....	850	165 59	796	987	45 11	80 04
80	Emsdale	.....	No annual report for 1920					
81	Ennotville	.....	Rural	179 72	4,908	1,174	69 70	105 72
82	Espanola	.....	3,500	1,182 93	1,714	4,000	156 80	441 43
83	Ethel	.....	250	151 49	1,465	3,708	33 70	28 40
84	Fenelon Falls	R	903	490 25	5,309	4,140	69 27	56 56
85	Fenwick	.....	315	3,252 93	575	1,551	105 95	286 12
86	Flesherton	.....	482	73 52	1,204	515	10 00	12 10
87	Fonthill	R	800	205 66	4,034	4,368	57 62	57 49
88	Fordwich	.....	485	100 89	2,283	2,079	17 63	19 32
89	Forester's Falls	.....	158	86 96	1,421	1,606	23 92	56 16
90	Fort Erie	.....	2,300	266 47	4,217	3,555	64 24	88 48
91	Frankford	.....	900	293 80	1,088	995	51 70	43 39
92	Fullerton	.....	1,798	51 00	504	.....	10 00	44 45
93	Glamis	.....	Rural	76 73	1,008	998	15 90	35 79
94	Glanworth	.....	600	67 15	528	1,063	12 90	31 31
95	Glen Allen	.....	200	23 33	1,457	846	10 00	.....
96	Glen Morris	.....	200	226 55	3,085	771	39 23	44 10
97	Gore Bay	R	630	322 21	1,602	1,574	84 78	62 78
98	Gore's Landing	.....	200	64 25	1,651	585	10 00	14 35
99	Gorrie	.....	400	37 84	2,145	601	10 00	.....
100	Grafton	.....	250	50 60	1,159	401	20 16	50 60
101	Haileybury	.....	4,000	88 03	151	286	36 97	79 53
102	Haliburton	.....	900	91 22	1,918	2,305	36 77	43 54
103	Harrietsville	.....	Rural	260 64	1,143	2,855	101 13	200 10
104	Harrington	.....	200	128 00	2,048	1,558	55 02	97 20
105	Harrow	R	750	403 27	2,082	3,770	77 28	86 96
106	Hastings	.....	780	51 33	1,200	2,898	10 00	7 33
107	Hawkesbury	.....	4,800	159 26	747	2,470	53 93	82 45
108	Hawkesville	.....	No annual report for 1920					
109	Hepworth	.....	1,000	10 00	525	235	.....	.....
110	Highgate	R	650	443 62	647	359	129 26	244 16
111	Highland Creek	.....	675	76 65	1,799	1,080	16 05	25 95
112	Hillsdale	.....	No annual report for 1920					
113	Hillview	.....	298	12 00	601	954	10 00	.....
114	Holstein	.....	300	160 10	2,263	3,229	41 60	76 85
115	Honeywood	.....	100	79 15	910	601	30 01	51 10
116	Huntsville	R	2,160	442 50	4,416	4,056	84 05	103 27
117	Inglewood	.....	400	146 53	1,482	1,563	59 11	96 23
118	Inwood	.....	260	170 52	1,840	1,829	68 46	107 32
119	Iroquois	.....	840	148 73	1,999	2,678	41 17	84 35
120	Islington	.....	Rural	190 88	3,169	6,074	77 18	125 35
121	Ivanhoe	.....	Organized, March 3rd, 1921					
122	Jarvis	R	600	170 44	3,858	3,899	31 22	81 93

ASSOCIATION PUBLIC LIBRARIES

Statistics, 1920, showing Legislative Grants paid in 1921

No.	Library	Reading Room	Population	Total Expenditure	Volumes in Library	Circulation	Legislative Grant paid in 1920	Amount expended on Books in 1920
				$ c.			$ c.	$ c.
123	Kars	.....	Rural	133 25	1,853	909	39 14	74 41
124	Kearney	.....	360	121 60	375	2,500	43 39	99 02
125	Kemble	.....	400	266 84	1,406	825	26 50	13 00
126	Minmount	.....	400	203 11	1,668	4,539	18 58	94 91
127	Kintore	.....	280	172 31	1,931	2,366	64 32	110 00
128	Kirkfield	.....	100	137 17	2,513	1,672	57 38	84 77
129	Kirkton	.....	Rural	114 71	678	1,455	26 55	46 29
130	Komoka	.....	300	162 28	1,532	1,797	50 80	90 92
131	Lake Charles	.....	140	22 20	2,100	1,172	15 00	.....
132	Lefroy	.....	Rural	55 63	972	1,487	13 33	31 63
133	Linwood	.....	No annual report for 1920					
134	Lorne Park	.....	230	26 90	433	675	10 00	.....
135	Lucan	.....	700	293 03	1,696	4,228	59 01	77 58
136	Lyn	R	275	199 34	1,094	2,151	36 22	87 20
137	Madoc	.....	1,146	482 06	2,970	6,166	97 26	238 03
138	Mandamin	.....	200	288 69	1,505	1,608	90 68	103 96
139	Manilla	.....	200	455 82	5,208	2,356	163 40	286 80
140	Manotick	.....	No annual report for 1920					
141	Maple	.....	No annual report for 1920					
142	Markham	.....	900	.....	2,900	.....	.....	.....
143	Markstay	.....	Organized, April 22nd, 1921					
144	Marksville	.....	425	94 73	877	496	26 14	63 28
145	Marmora	.....	850	241 65	282	319	141 36	236 85
146	Martintown	.....	376	122 30	927	1,974	20 14	35 20
147	Matilda, Brinston, P. O	.....	Rural	134 00	514	2,514	18 11	81 20
148	Maxville	.....	760	84 76	369	713	35 00	40 00
149	Meaford	R	2,500	824 32	5,022	14,287	123 11	244 22
150	Melbourne	.....	206	104 83	1,306	980	18 84	42 23
151	Metcalfe	.....	No annual report for 1920					
152	Mildmay	.....	No annual report for 1920					
153	Millbank	.....	400	276 04	533	2,100	95 40	150 80
154	Millgrove	.....	Rural	4 73	636	624	5 00	.....
155	Milton	R	2,000	310 88	4,946	5,188	44 54	117 67
156	Minden	.....	300	88 45	2,098	1,860	17 82	23 85
157	Monkton	.....	350	94 79	1,425	951	13 86	19 99
158	Mono Centre	.....	63	32 60	904	844	19 35	25 10
159	Mono Mills	.....	No annual report for 1920					
160	Mono Road	.....	Rural	58 58	1,401	1,510	15 00	.....
161	Moorefield	.....	600	114 81	264	1,600	24 13	55 50
162	Morrisburg	R	1,500	421 42	3,531	5,257	95 06	49 01
163	Morriston	.....	2,733	139 65	1,549	850	14 00	92 49
164	Mount Albert	R	550	347 99	1,543	2,847	118 30	182 26
165	Mount Brydges	.....	400	116 23	1,223	865	18 79	22 74
166	Mount Hope	.....	200	403 72	558	3,050	72 38	193 64
167	Nanticoke	.....	130	61 50	2,548	1,426	10 00	3 00
168	Napanee	R	3,000	1,122 67	9,224	15,843	257 68	516 95
169	Napier	.....	200	48 62	597	614	22 68	42 19
170	Newburgh	R	432	207 14	2,472	1,570	56 76	59 32
171	Newbury	.....	300	101 50	1,255	2,080	18 25	21 70
172	New Dundee	R	360	158 55	1,308	2,529	62 69	66 65
173	Newington	.....	300	49 34	1,045	1,620	12 63	20 28
174	New Toronto	.....	Organized, March 18th, 1921					
175	Niagara	R	1,585	483 13	9,413	15,856	161 38	193 30
176	Norland	.....	580	92 55	1,416	2,010	15 00	57 00
177	North Cobalt	.....	Re-organized, February 17th, 1921					
178	North Gower	.....	350	126 94	2,390	3,127	16 50	78 23
179	Norwood	.....	800	87 20	2,574	2,739	16 68	13 70
180	Oakville	R	2,880	984 36	6,011	7,769	144 03	181 41
181	Odessa	R	700	171 86	1,493	9,726	36 01	40 10
182	Onemee	R	500	190 71	1,715	1,276	31 08	56 00

ASSOCIATION PUBLIC LIBRARIES Continued

Statistics, 1920, showing Legislative Grants paid in 1920

No.	Library	Reading Room	Population	Total Expenditure	Volumes in Library	Circulation	Legislative Grant paid in 1921	Amount expended on Books in 1919
				$ c.			$ c.	$ c.
183	Orono	.....	515	78 80	1,718	2,672	16 22	72 45
184	Oxford Mills	.....	300	53 87	1,319	1,324	10 00	.....
185	Pakenham	.....	No annual report for 1920					
186	Palermo	.....	No annual report for 1920					
187	Park Head	.....	250	69 12	580	944	27 61	40 10
188	Pickering	R	600	173 81	1,913	1,151	39 51	36 64
189	Pinkerton	.....	Rural	78 75	2,164	1,191	21 65	28 96
190	Plattsville	.....	600	177 28	2,778	3,240	40 20	68 53
191	Plympton (Camlachie, P. O.)	.....	335	118 30	1,622	1,752	38 99	74 05
192	Point Edward	.....	800	111 68	4,127	2,461	15 00	59 68
193	Port Credit	.....	1,300	292 93	3,241	7,839	40 03	98 79
194	Port Dover	.....	1,407	.....	1,398	1,000	.....	.....
195	Port Perry	R	1,200	502 11	2,690	5,819	75 98	105 70
196	Port Stanley	.....	750	231 24	2,280	3,072	41 39	83 76
197	Powassan	.....	600	349 89	946	4,482	151 73	284 02
198	Princeton	.....	.....	90 00	885	.....	.....	.....
199	Queensville	.....	290	141 75	3,158	2,267	36 32	88 86
200	Rainy River	.....	No annual report for 1920					
201	Ridgetown	R	2,300	332 21	4,196	7,209	95 15	132 88
202	Ripley	.....	278	12 50	1,372	158	10 00	.....
203	Riversdale	.....	Rural	69 02	240	1,701	10 00	39 30
204	Rodney	.....	656	197 86	1,263	742	39 03	161 91
205	Romney	.....	149	133 71	3,786	1,488	41 40	86 67
206	Runnymede	.....	4,000	217 72	2,546	6,997	49 76	105 00
207	Russell	R	700	450 97	662	1,744	83 96	130 24
208	St. George	R	700	509 83	5,414	2,310	38 29	104 60
209	St. Helen's	.....	Rural	160 52	1,982	1,889	44 39	78 30
210	Saltfleet	.....	250	238 13	3,097	4,980	64 61	137 18
211	Scarboro	.....	Rural	262 41	5,179	1,990	70 21	150 00
212	Scotland	R	400	286 30	2,034	1,830	47 16	52 76
213	Sheddon	.....	400	132 53	2,163	2,084	22 25	37 92
214	Shetland	.....	250	156 31	993	1,347	76 05	123 52
215	Singhampton	.....	400	52 43	326	276	10 00	32 43
216	Smithville	.....	600	224 59	1,220	4,400	63 42	133 49
217	Solina	.....	Rural	51 71	545	845	30 51	50 80
218	Sombra	.....	200	140 97	336	786	17 90	74 55
219	Sonya	.....	300	115 46	322	275	56 26	93 20
220	Southampton	.....	1,710	280 47	5,954	6,787	48 66	185 23
221	Southcote	.....	Organized February 1st, 1921					
222	South Mountain	.....	Rural	66 43	1,032	180	10 00	63 68
223	Sparta	.....	No annual report for 1920					
224	Speedside	.....	250	96 34	1,657	663	42 18	64 19
225	Stevensville	.....	340	156 62	928	1,590	53 11	79 22
226	Strathcona	.....	550	62 05	1,670	651	.....	37 00
227	Stratton	.....	Organized December 15th, 1921					
228	Swansea	R	Rural	376 12	244	1,879	83 27	126 54
229	Sydenham	R	200	2,080 16	1,842	2,788	14 63	40 10
230	Thamesford	.....	550	146 79	2,169	2,216	32 92	34 88
231	Thamesville	R	742	338 24	2,288	2,090	89 66	96 63
232	Thedford	.....	600	115 74	3,331	4,333	37 17	63 84
233	Thornbury	.....	773	2 30	1,377	2,173	5 00	2 25
724	Thorndale	.....	420	331 54	946	6,748	94 44	203 15
235	Thornhill	.....	450	109 80	72	1,339	69 94	109 80
236	Tiverton	.....	300	104 31	1,164	1,591	14 60	54 31
237	Tobermory	.....	Organized, September 23rd, 1921					
238	Tottenham	.....	600	94 31	2,625	1,148	15 22	38 06
239	Trout Creek	.....	454	109 79	1,245	1,097	44 94	69 89
240	Tweed	.....	1,400	290 73	2,312	6,551	54 75	70 28
241	Underwood	.....	216	794 22	558	500	.....	326 00

ASSOCIATION PUBLIC LIBRARIES (Concluded)

Statistics, 1920, showing Legislative Grants paid in 1921

No.	Library	Reading Room	Population	Total Expenditure	Volumes in Library	Circulation	Legislative Grant paid in 1921	Amount expended on Books in 1920
				$ c.			$ c.	$ c.
242	Unionville		400	115 22	1,621	1,631	31 13	48 28
243	Vankleek Hill		1,611	128 17	1,627	250	53 69	69 92
244	Varna		Organized, December 12th, 1921					
245	Victoria Caledonia, P. O.		Rural	306 14	3,795	926	45 20	98 61
246	Victoria Mines Coniston, P. O.		1,500	189 74	1,502	2,367	69 02	111 82
247	Victoria Road		300	124 80	543	177	51 98	80 10
248	Walton		Rural	20 70	1,487	1,765	10 00	.....
249	Wardsville		212	181 43	2,187	2,841	40 05	96 33
250	Warkworth		408	212 05	1,572	590	24 13	76 40
251	Waterdown	R	790	553 63	1,062	3,834	94 91	248 22
252	Welland	R	9,365	616 43	5,388	15,402	86 80	179 86
253	Wellesley		550	.....	2,003	.....	.....	.....
254	Westford		150	290	2,266	.....	10 00	.....
255	West Lorne		835	107 59	1,495	2,543	31 14	37 09
256	White Lake		No annual report for 1920					
257	Wiarton	R	1,774	431 46	3,520	3,863	88 13	88 01
258	Williamstown		Rural	79 35	2,449	1,280	28 74	39 55
259	Winchester	R	1,050	230 65	1,979	4,700	56 92	102 49
260	Woodville	R	500	207 53	2,675	1,430	50 61	27 30
261	Worthington	R	350	306 63	675	1,235	86 05	100 93
262	Wyoming		450	9 11	1,220	514	10 00	.....
263	Zephyr		400	143 53	1,572	1,795	28 34	85 40
264	Zurich		1,500	137 59	373	732	37 22	62 07
	Totals		166,368	52,598 85	473,950	635,307	11,181 54	20,636 56

Notes from Public Libraries' Register

Fourteen new libraries were added during 1921.

Two libraries were added to the list of Free Libraries during 1921: London, South East Branch and Saltfleet.

Kintore Library has been improperly placed for a number of years in the list of Free Libraries. It has now been transferred to the list of Association Libraries.

Twelve Association Libraries have been added to the list, all of which are new libraries. They are Allenford, Chalk River, Cochrane, Craighurst, Delaware, Ivanhoe, Markstay, New Toronto, Southcote, Stratton, Tobermory, and Varna.

Grants to Historical, Literary and Scientific Institutions

The following Historical, Literary and Scientific Institutions, etc., duly reported according to the requirements of the Act, and received the undermentioned grants during the fiscal year ending October 31st, 1921:

	$ c.
Brant Historical Society	100 00
Elgin Historical and Scientific Association	100 00
Essex Historical Society	100 00
Huron Institute	100 00
Kent Historical Society	100 00
Kingston Historical Society	100 00
L'Alliance Francaise, Ottawa	400 00
Lennox and Addington Historical Society	100 00
Lundy's Lane Historical Society	200 00
London and Middlesex Historical Society	100 00
Niagara Historical Society	300 00
Ontario Historical Society	1,100 00
Thunder Bay Historical Society, Fort William	100 00
Wentworth Historical Society	200 00
Women's Canadian Historical Society of Ottawa	300 00
Women's Canadian Historical Society of Toronto	100 00
Women's Wentworth Historical Society	300 00
Hamilton Scientific Association	400 00
Canadian Institute	2,500 00
Club Litteraire Canadien Francais, Ottawa	300 00
L'Institut Canadien Francais, Ottawa	300 00
Ottawa Field Naturalists' Club	200 00
Royal Astronomical Society, Toronto	600 00
Society of Chemical Industry	300 00
Ontario Library Association	400 00
St. Patrick's Literary Association of Ottawa	200 00
Canadian Free Library for the Blind	700 00
Waterloo Historical Society	100 00
United Empire Loyalists	200 00
York Pioneers	200 00
Institut Jeanne D'Arc, Ottawa	200 00
Le Cercle Social, Ottawa	200 00
Folk Lore Society	100 00
Grenville Pioneer and Historical Society	100 00
Georgian Bay Historical Society	200 00
Parry Sound Historical Society	100 00
Owen Sound Historical Society	100 00
Gore Bay Historical Society	50 00
Little Current Historical Society	50 00
Manitowaning Historical Society	50 00

APPEN-
TEACHERS'
FINANCIAL

Name of Institute	Total Registered Attendance of Members	Receipts		
		Government Grant	Municipal Grant	Members' Fees
		$ c.	$ c.	$ c.
1 Algoma, East	137	.....	.....	81 00
2 Algoma (Eastern Division)	28	50 00	.....	14 00
3 Brant	140	50 00	50 00	94 50
4 Bruce, East	120	.....	50 00	.....
5 Bruce, West	110	.....	50 00	22 84
6 Carleton, East	145	50 00	50 00	72 50
7 Carleton, West, and Lanark, East	107	50 00	50 00	111 00
8 Dufferin	104	50 00	100 00	24 50
9 Dundas	101	50 00	.....	50 50
10 Elgin East	107	50 00	50 00	104 00
11 Elgin West	104	.....	78 00	37 00
12 Essex North	70	25 00	50 00	.....
13 Essex South	170	.....	.....	40 75
14 Frontenac North and Addington	42	.....	34 69	10 75
15 Frontenac South	103	50 00	50 00	25 75
16 Glengarry	113	.....	50 00	23 50
17 Grey East	85	25 00	50 00	.....
18 Grey South	88	.....	50 00	17 75
19 Grey West	130	50 00	50 00	67 50
20 Haliburton	34	.....	25 00	9 50
21 Haldimand	101	.....	50 00	21 00
22 Halton	105	50 00	50 00	25 00
23 Hastings Centre	108	50 00	50 00	.....
24 Hastings North	64	25 00	50 00	14 25
25 Hastings South and Belleville	129	50 00	50 00	32 75
26 Huron East	124	50 00	50 00	54 50
27 Huron West	129	.....	50 00	32 25
28 Kenora	48	50 00	.....	.....
29 Kent East	106	50 00	50 00	25 50
30 Kent West and City of Chatham	142	50 00	50 00	35 50
31 Lambton East	104	50 00	50 00	53 00
32 Lambton West	152	50 00	50 00	76 50
33 Lanark West and Smith Falls	125	50 00	50 00	29 50
34 Leeds East and Brockville (No. 2)	112	50 00	50 00	56 00
35 Leeds West (No. 1)	85	.....	50 00	20 50
36 Leeds and Grenville (No. 3)	94	.....	25 00	48 00
37 Lennox and Addington	93	50 00	25 00	42 25
37 Lincoln	112	50 00	50 00	26 50
39 Manitoulin East	33	50 00	.....	30 00
40 Manitoulin West	28	50 00	.....	26 00
41 Middlesex East	124	50 00	50 00	31 25
42 Middlesex West	115	50 00	50 00	83 25
43 Muskoka	106	50 00	.....	44 50
44 Nipissing	62	50 00	.....	31 00
45 Norfolk	113	50 00	100 00	52 50
46 Northumberland and Durham No. 1	108	50 00	100 00	23 50
47 Northumberland and Durham No. 2	102	50 00	50 00	18 25
48 Northumberland and Durham No. 3	91	.....	50 00	22 75
49 Ontario North	93	25 00	25 00	45 50
50 Ontario South	111	50 00	50 00	54 00
51 Oxford	216	75 00	75 00	50 75
52 Parry Sound East	57	50 00	.....	14 00
53 Parry Sound West	62	50 00	.....	28 25
54 Peel	104	50 00	100 00	103 00
55 Perth and City of Stratford	207	75 00	75 00	104 00
56 Peterborough	113	50 00	50 00	52 50
57 Prescott and Russell	102	.....	.....	25 50

DIX L
INSTITUTES
STATEMENT

	Receipts—Continued		Expenditures				
	Balances and other sources	Total Receipts	Printing, Postage, etc.	Libraries, Educational Journals	Miscellaneous	Total Expenditure	Balances
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
1	173 10	254 10	8 80	.....	106 00	114 80	139 30
2	67 81	131 81	10 77	35 15	43 25	89 17	42 64
3	154 97	349 47	35 08	95 82	100 80	231 70	117 77
4	411 39	461 39	12 15	16 50	189 65	218 30	243 09
5	428 81	501 65	16 25	105 53	143 60	265 38	236 27
6	51 89	224 39	28 03	50 37	120 00	198 40	25 99
7	100 98	311 98	67 33	67 97	148 05	283 35	28 63
8	76 53	251 03	43 76	35 00	84 95	163 71	87 32
9	89 77	190 27	29 97	10 00	132 80	172 77	17 50
10	163 34	367 34	11 15	231 63	63 52	306 30	61 04
11	85 02	200 02	10 30	11 10	30 55	51 95	148 07
12	99 43	174 43	7 06	.....	55 00	62 06	112 37
13	114 75	155 50	20 36	.....	66 70	87 06	68 44
14	70 09	115 53	5 50	31 08	27 57	64 15	51 38
15	207 75	333 50	5 50	21 00	94 25	120 75	212 75
16	230 57	304 07	71	.....	70 15	70 86	233 21
17	174 20	249 20	12 77	94 83	51 01	158 61	90 59
18	290 52	358 27	.....	83 00	85 25	168 25	190 02
19	117 89	285 39	6 42	.....	143 58	150 00	135 39
20	56 91	91 41	12 22	.....	53 00	65 22	26 19
21	689 39	760 39	12 75	30 69	76 15	119 59	640 80
22	323 62	448 62	22 35	156 76	75 49	254 60	194 02
23	13 20	113 20	11 80	.....	39 55	51 35	61 85
24	171 11	260 36	19 57	150 55	55 50	225 62	34 74
25	77 37	210 12	12 26	80 75	94 47	187 48	22 64
26	233 94	388 44	34 40	75 75	77 94	188 09	200 35
27	122 85	205 10	63 59	67 50	71 10	202 19	2 91
28	89 32	139 32	10 24	.....	73 00	83 24	56 08
29	415 59	541 09	8 30	.....	50 00	58 30	482 79
30	301 91	437 41	3 17	42 00	37 20	82 37	355 04
31	2 31	155 31	15 78	21 27	115 40	152 45	2 86
32	232 47	408 97	12 13	64 00	118 00	194 13	214 84
33	160 70	290 20	9 66	84 50	65 74	159 90	130 30
34	68 28	224 28	23 00	58 80	65 00	146 80	77 48
35	211 07	281 57	11 07	89 60	101 51	202 18	79 39
36	119 79	192 79	7 95	.....	36 35	44 30	148 49
37	21 13	138 38	15 66	30 00	90 00	135 66	2 72
38	156 63	283 13	17 81	75 66	114 28	207 75	75 38
39	41 60	121 60	9 31	5 50	43 19	58 00	63 60
40	39 32	115 32	10 94	25 75	67 45	104 14	11 18
41	102 84	234 09	23 45	7 50	67 37	98 32	135 77
42	233 24	416 49	26 25	72 36	66 77	165 38	251 11
43	130 81	225 31	18 44	35 55	36 40	90 39	134 92
44	95 09	176 09	7 15	23 34	90 05	120 54	55 55
45	164 23	366 73	33 79	50 00	96 30	180 09	186 64
46	150 92	324 42	36 52	69 62	30 55	136 69	187 73
37	24 41	142 66	14 93	18 51	35 00	68 44	74 22
48	348 86	421 61	34 00	.....	182 45	216 45	205 16
49	92 00	187 50	16 83	25 00	92 20	134 03	53 47
50	351 63	505 63	32 00	74 40	118 15	224 55	281 08
51	142 51	343 26	19 01	82 39	146 72	248 12	95 14
52	136 86	200 86	15 58	3 00	33 05	51 63	149 23
53	55 36	133 61	11 84	.....	17 77	29 61	104 00
54	64 49	317 49	29 80	88 04	156 88	274 72	42 77
55	143 73	397 73	33 10	.....	189 60	222 70	175 03
56	92 18	244 68	11 10	54 00	54 08	119 18	125 50
57	419 20	444 70	23 43	20 10	93 52	137 05	307 65

TEACHERS'
FINANCIAL

Name of Institute	Total Registered Attendance of Members	Receipts		
		Government Grant	Municipal Grant	Members' Fees
		$ c.	$ c.	$ c.
58 Prince Edward	102	25 00	25 00	93 25
59 Rainy River	53	50 00	.....	53 00
60 Renfrew North	120	50 00	50 00	54 00
61 Renfrew South	131	50 00	50 00	32 25
62 Simcoe East	127	50 00	50 00	29 00
63 Simcoe North	120	50 00	100 00	30 00
64 Simcoe South West	107	.....	50 00	27 00
65 Stormont	123	50 00	50 00	59 25
66 Sudbury	160	50 00	.....	25 25
67 Thunder Bay	222	50 00	75 00	55 50
68 Timiskaming North	65	50 00	.....	65 00
69 Timiskaming South	106	.....	.....	53 00
70 Victoria	148	50 00	50 00	74 50
71 Waterloo	308	.....	100 00	163 00
72 Welland	198	.....	.....	43 00
73 Wellington North	95	.....	50 00	95 00
74 Wellington South	163	50 00	50 00	.....
75 Wentworth	143	50 00	50 00	117 00
76 York East	171	50 00	.....	84 75
77 York North	96	.....	.....	46 75
78 York West	149	50 00	.....	39 00
79 *Ontario Educational Association	988	2,000 00	.....	460 70
Cities				
80 Brantford	119	25 00	25 00	34 50
81 Guelph	56	25 00	25 00	.....
82 Hamilton	445	125 00	150 00	119 00
83 Kingston	74	25 00	25 00	18 50
84 London	263	75 00	75 00	145 00
85 Ottawa	387	100 00	100 00	145 50
86 Peterborough	109	50 00	50 00	81 75
87 St. Catharines and Niagara Falls	97	50 00	50 00	48 50
88 Toronto, District No. 1	229	.....	43 87	58 50
89 " " " 2	227	.....	.....	111 00
90 " " " 3	241	.....	.....	59 75
91 " " " 4	225	.....	.....	57 50
92 " " " 5	217	76 07	76 07	52 25
93 " " " 6	209	63 13	30 22	53 75
94 " " " 7	233	.....	.....	56 00
95 " " " 8	214	75 00	74 72	61 50
96 Windsor and Walkerville	145	50 00	50 00	72 50
Totals, 1920	13,303	5,514 20	3,937 57	5,116 54
Totals, 1919	12,767	6,475 00	4,405 89	4,368 55
Increases	536	.....	.....	747 99
Decreases	.....	960 80	468 32	.....

*Statement for 1920-21.

INSTITUTES (Concluded)

STATEMENT (Concluded)

	Receipts—Continued		Expenditures				
	Balances and other sources	Total Receipts	Printing, Postage, etc.	Libraries, Educational Journals	Miscellaneous	Total Expenditure	Balances
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
58	16 68	159 93	22 81	33 98	81 89	138 68	21 25
59	90 21	193 21	9 63	3 00	91 60	104 23	88 98
60	144 60	298 60	16 90	49 19	72 97	139 06	159 54
61	132 19	264 44	9 91	37 89	77 00	124 80	139 64
62	164 45	293 45	11 56	76 45	53 50	141 51	151 94
63	128 84	308 84	29 50	10 00	141 00	180 50	128 34
64	194 45	271 45	14 73	127 16	57 15	199 04	72 41
65	106 32	265 57	29 23	112 10	77 75	219 08	46 49
66	70 90	146 15	12 61	25 00	42 70	80 31	65 84
67	197 19	377 69	38 65	52 74	155 38	246 77	130 92
68	15 04	130 04	21 25	12 09	29 65	62 99	67 05
69	89 51	142 51	25 21	25 00	66 10	116 31	26 20
70	257 74	432 24	40 13	194 35	68 52	303 00	129 24
71	264 15	527 15	54 93	113 38	206 58	374 89	152 26
72	327 68	370 68	11 00	79 43	178 15	268 58	102 10
73	110 91	255 91	6 00	72 51	95 00	173 51	82 40
74	291 06	391 06	.....	2 50	88 00	90 50	300 56
75	86 87	303 87	61 95	121 94	110 95	294 84	9 03
76	384 85	519 60	140 15	181 46	130 96	452 57	67 03
77	294 22	340 97	77 16	125 47	42 00	244 63	96 34
78	377 29	466 29	100 81	133 16	227 61	461 58	4 71
79	1,895 36	4,356 06	204 37	.....	1,703 95	1,908 32	2,447 74
80	62 90	147 40	2 00	52 68	37 66	92 34	55 06
81	60 77	110 77	1 89	27 92	21 35	51 16	59 61
82	282 88	676 88	25 00	234 78	127 10	386 88	290 00
83	34 36	102 86	13 94	37 60	45 21	96 75	6 11
84	182 90	477 90	25 07	77 20	316 03	418 30	59 60
85	72	346 22	21 25	145 00	172 50	338 75	7 47
86	97 68	279 43	3 45	84 50	96 10	184 05	95 38
87	82 37	230 87	11 90	94 01	40 25	146 16	84 71
88	17 39	119 76	24 61	.....	85 50	110 11	9 65
89	31 49	142 49	44 86	.....	50 00	94 86	47 63
90	373 61	433 36	23 50	.....	244 78	268 28	165 08
91	218 30	275 80	19 83	.....	51 14	70 97	204 83
92	40 52	244 91	25 44	144 21	60 00	229 65	15 26
93	58 62	205 72	34 00	6 85	60 00	100 85	104 87
94	159 59	215 59	23 91	.....	130 00	153 91	61 68
95	86	212 08	45 15	55 30	110 00	210 45	1 63
96	122 42	294 92	72 27	.....	145 70	217 97	76 95
	16,873 57	31,441 88	2,419 65	5,120 72	10,375 59	17,915 96	13,525 92
	18,385 62	33,635 06	3,357 36	7,423 73	8,650 59	19,431 68	14,203 38
	.....	.....	.....	.....	.....	.....	.....
	1,512 05	2,193 18	9,377 71	2,303 01	1,725 00	1,515 72	677 46

APPEN-
FIFTH CLASSES

Inspectorate		Name of School (In the case of rural schools the section number and the name of the township are given.)	Post Office
Algoma	1	1 McDonald	Echo Bay
Brant and N. Norfolk (in part)	2	8 Burford	Burford
	3	11 Windham	Vanessa, R. R. 2
Bruce, East	4	Mildmay	Mildmay
Bruce, West	5	Tiverton	Tiverton
Dundas	6	4 Winchester	Winchester, R. R. 1
	7	6 Mountain	Inkerman
Elgin, East	8	3 Southwold	Southwold
Grey, East	9	U 12 Artemesia and Glenelg	Priceville
	10	3 Euphrasia	Kimberley
Haldimand	11	U 3 Walpole	Selkirk
Halton and Wentworth (in part)	12	U 9 W. Flamboro'	Freelton
Huron, East	13	17 Howick	Fordwich
Huron, West	14	Hensall	Hensall
	15	U 8 Ashfield	Dungannon
	16	7 Hay	Zurich
	17	5 Stephen	Crediton
	18	U 16 Stephen	Dashwood
	19	6 Usborne	Woodham, R. R. 1
	20	4 W. Wawanosh	Lucknow, R. R. 1
	21	Bayfield	Bayfield
Kenora, Thunder Bay East, etc	22	1 Schreiber	Schreiber
	23	Sioux Lookout	Sioux Lookout
Kent, West	24	9 Chatham	Tupperville
	25	Wheatley	Wheatley
Lambton, East	26	5 Euphemia	Florence
	27	8 Euphemia	Inwood, R. R. 1
	28	9 Euphemia	Cairo, R. R. 1
Lambton, West	29	11 Moore	Brigden
	30	Courtright	Courtright
Leeds and Grenville, No. 3	31	1 & 5 Oxford and Marlborough	Burritt's Rapids
Lincoln	32	10 S. Grimsby	Smithville, R. R. 1
	33	3 Louth	St. Catherines, R. R. 1.
Manitoulin	34	1 Carnarvon	Mindemoya
Muskoka, South and West	35	Port Carling	Port Carling
Northumberland and Durham, No. 3	36	16 & 18 Murray and Brighton	Wooler

DIX M

1920-21

Name of Principal and Degree if any	Teachers: Professional Certificate	Teachers: Annual Salary, 1921	Pupils: No. of Pupils	Pupils: Average Daily Attendance	Grade of Fifth Class: A	Grade of Fifth Class: B	Grade of Fifth Class: C	Total Value of Approved Equipment	Legislative Grant
		$						$ c.	$ c.
1 Annie W. McIntosh	I	1,200	10	7	....	1	....	307 70	241 54
2 John A. Henry	II	1,450	8	7	1	....	....	708 33	158 92
3 Revah E. Miller	II	800	3	3	....	1	....	168 12	81 81
4 Wm. V. Tovell	II	1,200	11	9	....	1	....	468 15	139 20
5 Maude B. Alexander	II	1,000	3	3	....	1	....	331 64	131 56
6 Jessie Sutherland	I	1,000	4	2	1	....	....	342 75	143 55
7 Orvil Ault	II	1,000	5	3	....	1	....	253 71	90 02
Alice Campbell	II	900	3	2	....	1	....	227 08	87 70
9 Annie Harrow	II	1,100	7	5	1	....	....	235 00	133 50
10 Katherine M. Falkner	I	900	7	3	1	....	....	253 00	156 55
11 John J. Fenton	I	1,200	5	3	1	..	....	681 43	158 50
12 Meryol E. Logan	I	1,000	13	8	....	1	....	293 87	119 38
13 George H. Jefferson	II	1,450	13	11	....	1	....	313 09	96 30
14 Wm. MacKay	II	1,400	13	9	1	....	....	270 00	167 00
15 Fred. Ross	II	1,200	6	4	1	....	....	220 00	132 00
16 M. C. Milliken	II	1,275	14	13	1	....	....	321 50	142 15
17 Marcus C. Roszell, B.A.	II	1,300	13	11	1	....	....	393 00	174 30
18 George S. Howard	II	1,500	12	8	1	....	....	343 00	142 80
19 Jean Ready	II	1,100	15	14	1	....	....	220 00	132 00
20 Dorothy Douglas	I	950	9	6	1	....	....	224 00	132 40
21 Hugh Fisher	I	1,250	7	4	....	1	....	280 00	127 40
22 Geo. A. Evans	III	2,100	12	9	1	....	....	197 72	259 54
23 W. K. F. Kendrick	I	1,200	5	3	1	....	....	187 42	316 98
24 F. Mydra Smith	I	1,200	5	4	....	1	....	257 68	90 76
25 Minnie Sherrett	II	1,200	4	2	1	....	....	444 80	177 99
26 Burt Currie	I	1,120	8	5	1	....	....	226 75	132 67
27 Edna Moorhouse	I	1,100	5	4	....	....	1	122 68	67 26
28 Leapha Annett	II	900	3	2	....	....	1	120 00	67 00
29 Wm. E. Jarrott	II	1,100	17	15	1	....	....	472 97	146 83
30 A. F. McIntyre	I	1,200	4	3	....	....	1	205 01	120 50
31 Mabel E. McKeever	I	1,100	6	4	....	1	....	268 07	91 80
32 Mrs. E. B. Aikenhead	I	1,000	5	4	....	....	1	126 98	67 69
33 Beatrice McKenzie	II	1,150	5	4	....	....	1	192 18	69 21
34 Frank Purdy	I	1,480	8	7	....	1	....	535 00	192 00
35 Bruce Mines	II	1,250	6	4	....	1	....	126 86	225 36
36 Neta Ellis	I	1,000	17	12	1	....	....	272 66	162 26

FIFTH CLASSES

Inspectorate		Name of School (In the case of rural schools the section number and the name of the township are given.)	Post Office
Ontario, North	37	13 Brock	Sunderland
	38	U 4 Brock	Manilla
	39	5 Scott	Zephyr
Ontario, South	0	4 Pickering, West	Pickering
Oxford, North	41	Embro	Embro
	42	5 & 1 E. Nissour and N. Oxford	Thamesford
Oxford, South	43	12 Dereham	Brownsville
Parry Sound, South	44	U 1 Chapman	Magnetawan
	45	7 Humphrey	Rosseau
	46	1 McKellar	McKellar
	47	1 McMurrich	Sprucedale
	48	1 Wallbridge	Byng Inlet
Parry Sound, East	49	4 Himsworth, N	Callander
	50	1 Nipissing	Nipissing
	51	1 McConkey	Loring
	52	Kearney	Kearney
	53	South River	South River
	54	Sundridge	Sundridge
	55	Trout Creek	Trout Creek
Perth North	56	10 Elma	Atwood
	57	U 6 Logan and Elma	Monkton
Prescott and Russell	58	2 Cumberland	Vars
	59	5 Cumberland	Cumberland
	60	10 & 3 Plantagenet, N. and S	Pendleton
	61	L'Orignal	L'Orignal
Rainy River	62	5 Lash	Emo
	63	Rainy River	Rainy River
Renfrew, North	64	6 Ross	Foresters' Falls
	65	7 Westmeath	Beachburg
Simcoe, East	66	4 Medonte	Hillsdale
	67	Victoria Harbour	Victoria Harbour
Simcoe, S. W	68	10 Essa	Angus
Sudbury (in part) and North Nipissing	69	Massey	Massey
	70	Webbwood	Webbwood
	71	1 Creighton and Snider	Creighton Mine
	72	2 Neelon	Coniston
	73	2 Denison and Drury	Worthington
Victoria, East	74	U 3 Somerville	Kinmount
Victoria, West	75	8 Mariposa	Little Britain
	76	Woodville	Woodville

1920-21 (Continued)

Name of Principal and Degree if any	Professional Certificate	Annual Salary, 1921	Pupils: No. of Pupils	Pupils: Average Daily Attendance	Grade of Fifth Class: A	Grade of Fifth Class: B	Grade of Fifth Class: C	Total Value of Approved Equipment	Legislative Grant
		$						$ c.	$ c.
37 Frank W. Davis	II	1,000	5	4	....	1	....	219 46	86 94
38 Belle Shannon	II	1,000	4	3	....	1	....	213 08	86 35
39 Julius Rynard	II	1,300	7	5	....	1	....	211 01	86 10
40 W. A. Henderson	II	1,100	3	2	1	....	....	315 04	141 50
41 Reuben Ardiell	II	1,400	7	6	....	1	....	359 57	135 95
42 G. C. Francis	I	1,400	9	7	1	....	....	266 88	136 68
43 Jessie Kelso	I	1,300	6	3	1	....	....	409 87	170 05
44 Godfrey Grunig	II	1,500	7	5	....	1	....	389 09	207 32
45 Ruth Denike	I	1,100	4	3	....	1	....	205 11	171 02
46 Clarence Ross	II	1,000	7	6	....	1	....	264 34	182 86
47 Annie Card	I	1,200	13	10	....	1	....	210 86	222 16
48 W. F. Armstrong	II	1,500	10	7	1	....	....	264 63	271 54
49 Roy W. Warnica	II	1,400	5	4	1	....	....	256 00	271 00
50 Lewis C. Armstrong	I	1,360	9	7	....	1	....	298 00	239 60
51 John A. Sangster	II	1,000	2	2	....	1	....	190 00	168 00
52 Neil D. Reid, B.A.	I	1,500	8	7	....	1	....	378 00	325 60
53 Leo W. Copp	II	1,300	9	6	1	....	....	294 00	338 80
54 John R. Teasdale	II	1,100	6	4	1	....	....	284 00	336 80
55 A. W. Jacklin	II	1,100	2	2	....	1	....	287 00	257 40
56 Thomas G. Ratcliffe	II	1,200	3	2	....	....	1	125 54	67 55
57 Charles A. McDougall	I	1,100	5	3	....	....	1	214 99	50 99
58 William McGregor	I	1,332	10	5	1	....	....	237 51	133 75
59 Charles F. Chambers	I	1,000	10	5	1	....	....	242 17	134 21
60 Mary Watson	II	1,000	3	2	....	1	....	163 24	81 32
61 Sr. St. Armand	II	800	6	5	1	....	....	236 15	153 61
62 Percy W. Farr	I	1,250	17	13	1	....	....	489 54	273 58
63 May Bishop	I	1,300	19	16	1	....	....	436 24	351 10
64 May B. Jackson	I	1,200	19	15	....	....	1	277 00	82 70
65 Edna J. Johnston	II	1,600	25	20	1	....	....	297 00	141 60
66 G. R. Chapman	II	1,000	4	2	....	1	....	110 77	76 07
67 Clare R. Fallis	I	1,500	11	9	1	....	....	222 98	162 69
68 Mary Bristow	I	1,200	5	4	....	1	....	171 44	107 14
69 M. Wooldridge	II	1,200	17	14	1	....	....	583 00	373 40
70 Mabel Boyce	II	1,200	6	3	1	....	....	395 00	356 00
71 Irene McGregor	I	1,800	4	4	1	....	....	*	304 96
72 John T. Kidd	II	1,500	4	4	....	1	....	319 00	193 80
73 Edmund L. Elliott	II	1,500	3	2	....	....	1	165 00	137 60
74 Wm. L. Walling		1,000	8		1	....	....	222 76	1 2 27
75 Chas. H. Lapp	II	1,200	4	2	....	1	....	216 98	86 69
76 George B. Rennie	II	1,150	5	3	....	1	....	213 44	21 34

* All equipment destroyed by fire March, 1921.

FIFTH CLASSES

Inspectorate		Name of School (In the case of rural schools the section number and the name of the township are given.)	Post Office
Waterloo, North	77	16 Wellesley	Wellesley
Welland, South	78	9 Bertie	Stevensville
Wellington, South	79	6 Erin	Hillsburg
Wentworth	80	3 Binbrook	Binbrook
	81	U 7 W. and E. Flamboro'	Millgrove
York, North	82	9 Georgina	Pefferlaw
	83	2 King	King
	84	19 King	Nobleton
	85	23 King	King
York, East	86	15 York	Fairbank
York, West	87	2 Etobicoke	Islington, R. R.
	88	Woodbridge	Woodbridge
R. C. Separate Schools—			
Inspector Finn	89	3 Mara	Brechin
	90	2 Burgess, N	Stanleyville
Inspector Jones	91	10 Lancaster	Dalhousie Sta. Que., R. R. No. 1
	92	15 Charlottenburgh	St. Raphael, West
	93	16 Cornwall	St. Andrews, West
Inspector Lapensee	94	6 Russell	Embrun
Inspector Lee	95	1 Carrick and Culross	Formosa
	96	2 Ashfield	Goderich, R. R. 3
	97	6 Stephen and McGillivray	Parkhill, R. R. 8
	98	6 Ellice and Logan	Sebringville, R. R. 1
	99	2 Hibbert, McKillop and Logan	Dublin
	100	Mildmay	Mildmay
Inspector Quarry	101	Killaloe	Killaloe
	102	Mattawa	Mattawa
	103	7 Bromley	Douglas
	104	1 Brougham	Ashdad, R. R. 1
Inspector Scanlan	105	7 Hawkesbury, E	St. Eugene

1920-21 (Concluded)

Teachers			Pupils		Grade of Fifth Class				
Name of Principal and Degree if any	Professional Certificate	Annual Salary, 1921	No. of Pupils	Average Daily Attendance	A	B	C	Total Value of Approved Equipment	Legislative Grant
		$						$ c.	$ c.
77 Frank M. Mugan	II	1,250	3	3	1	....	....	202 60	130 26
78 Isaac P. Asselstine, B.A.	I	1,600	7	5	....	1	....	336 43	123 64
79 Ross R. MacKay	II	1,200	6	4	....	1	....	225 69	87 56
80 Mrs. Estella Burkholder	II	1,200	8	5	....	1	....	217 47	86 74
81 John A. Dalton	II	1,200	3	2	....	1	....	244 75	89 47
82 Lottie S. Sprague	I	1,050	3	2	....	1	....	244 26	89 42
83 Cyrus M. Rowe	II	1,200	6	5	....	1	....	237 45	88 74
84 Idella M. Norris	II	800	3	2	....	1	....	212 25	86 22
85 Walter Rolling	II	1,200	5	3	....		1	236 75	78 67
86 John Gilchrist	II	1,800	8	7	....	1	....	86 19	73 61
87 Wm. A. Whitfield	II	1,250	8	6	....	1	....	92 76	74 27
88 George W. Shore	II	1,600	6	4	1	....	....	359 26	175 60
89 Mildred Clifford	II	1,100	16	14	1	....	....	134 77	246 94
90 Mary Overend	I	1,000	4	3	....	1	....	110 00	152 00
91 Sr. M. Jerome, B.A.	I	1,250	52	43	1	....	....	1,106 69	370 00
92 Sr. M. St. Florina	I	1,000	32	23	1	....	....	625 55	339 92
93 Sr. M. Camilla	II	1,200	11	9	1	....	....	531 73	311 92
94 Sr. St. Maximilian	II	550	12	11	1	....	....	442 74	168 44
95 Sr. M. Bridilia	II	1,300	4	2	1	....	....	112 44	242 48
96 Sr. M. Isabel, B.A.	I	1,100	10	9	1	....	....	559 86	361 02
97 Madeleine Glavin	II	1,100	4	4	....	1	....	139 09	157 80
98 St. M. Fidelis, B.A.	I	1,200	8	7	1	....	....	697 83	362 00
99 M. M. Dolores	I	1,400	48	40	1	....	....	587 36	311 04
100 Sr. M. Solania	II	900	3	3	1	....	....	417 95	272 46
101 Sr. M. Nativity	I	450	27	21	1	....	....	261 00	217 20
102 Augustine Kelly	II	700	4	3	1	....	....	532 00	706 80
103 Sr. M. Helen	I	800	56	48	1	....	....	575 00	341 40
104 Sr. M. Beatrice	II	700	27	22	1	....	....	347 00	211 40
105 Sr. Francois Xavier	II	580	15	14	1	....	..	422 15	157 52
Totals, 1920-21	.....	* 1,188	1001	774	53	43	9	31,570 86	18,549 21
Totals, 1919-20	.....	* 997	895	656	47	46	13	29,366 43	18,993 35
Increases	.....	191	106	118	6	....	..	2,204 43	.....
Decreases	.....	.....	.....	.....		3	4	.....	444 14

* Average salary.

† In addition there was paid on equipment, the sum of $252.94 to schools that did not qualify as Fifth Classes in 1920-21.

APPENDIX N

RURAL SCHOOL LIBRARIES, OCT. 1st, 1920, TO OCT. 1st, 1921

Inspectarate	No. of schools purchasing books to the amount of $10 during the year	Total amount expended by such schools during the year for books recommended	Total Government grant	No. of rural public school libraries in inspectorate	No. of libraries established during year
		$ c	$ c		
Algoma	3	112 35	27 29	41	.....
Brant and Norfolk in part	20	300 41	127 84	77	.....
Bruce, East	17	204 57	102 27	83	.....
Bruce, West	48	754 59	337 75	83	1
Carleton, East	23	340 00	152 67	84	.....
Carleton, West and Lanark East	12	136 96	68 46	82	.....
Dufferin	26	375 53	180 72	92	.....
Dundas	16	196 83	97 95	74	.....
Elgin, East	43	512 00	252 00	77	.....
Elgin, West	5	52 00	26 00	29	.....
Essex	23	373 82	173 32	96	1
Essex, North in part	5	70 97	35 47	15	.....
Frontenac, North and Addington	14	181 63	90 73	78	.....
Frontenac, South	8	114 75	54 86	95	.....
Glengarry	6	93 39	45 58	75	.....
Grey, East	4	71 25	28 37	83	.....
Grey, South	4	44 70	22 34	66	.....
Grey, West	12	154 93	75 84	70	.....
Haldimand	17	217 84	96 72	74	.....
Haliburton and Muskoka, East	11	204 22	82 20	86	.....
Halton and Wentworth in part	12	156 65	70 46	69	.....
Hastings, Centre	10	139 88	63 60	72	.....
Hastings, North	12	161 84	78 59	55	.....
Hastings, South	11	143 58	71 27	50	.....
Huron, East	18	245 29	122 28	84	.....
Huron, West	10	133 40	63 26	104	.....
Kenora, Thunder Bay East and Algoma in part	2	38 41	16 68	25	1
Kent, East	34	499 88	226 42	69	.....
Kent, West	32	383 36	184 48	65	.....
Lambton, East	13	197 34	83 66	87	.....
Lambton, West	11	128 14	63 92	81	1
Lanark, West	20	250 85	125 39	72	.....
Leeds and Grenville, No. 1	15	179 31	83 81	75	.....
Leeds and Grenville, No. 2	29	352 14	174 69	67	.....
Leeds and Grenville, No. 3	5	58 36	29 17	75	.....
Lennox	7	98 85	45 48	82	.....
Lincoln	27	515 72	219 72	65	.....
Manitoulin, etc	5	92 67	36 33	53	1
Middlesex, East	17	191 86	95 81	103	.....
Middlesex, West	20	247 35	121 47	81	.....
Muskoka, South-West	9	108 65	54 31	78	.....
Norfolk	17	201 38	100 66	84	.....
Northumberland and Durham No. 1	20	291 24	136 54	63	.....
Northumberland and Durham, No. 2	7	82 39	41 18	74	.....
Northumberland and Durham, No. 3	10	172 30	65 94	65	1
Ontario, North	15	263 68	107 12	75	.....
Ontario, South	5	72 04	35 91	43	.....
Oxford, North	20	333 66	134 85	58	.....
Oxford, South	12	135 02	67 49	48	.....
Parry Sound East, Muskoka North and Nipissing South	2	25 45	12 72	71	.....
Parry Sound, South	5	99 26	35 21	68	.....

RURAL SCHOOL LIBRARIES, OCT. 1st, 1920 TO OCT. 1st, 1921 (Concluded)

Inspectorate	No. of schools purchasing books to the amount of $10 during the year	Total amount expended by such schools during the year for books recommended	Total Government grant	No. of rural public school libraries in inspectorate	No. of libraries established during year
		$ c.	$ c.		
Peel	12	147 52	73 76	74	1
Perth, North	18	246 75	121 69	68	.....
Perth, South	9	162 66	66 71	44	.....
Peterborough, East	12	144 86	72 42	71	.....
Peterborough West and Victoria East	4	67 80	28 90	59	.....
Prescott and Russell	13	168 05	83 16	82	.....
Prince Edward	29	325 48	162 71	76	.....
Rainy River and Kenora in part	.....	.....	.....	47	.....
Renfrew, North	4	47 65	23 82	76	.....
Renfrew, South	6	99 17	41 77	81	.....
Simcoe, East	2	52 71	20 00	59	.....
Simcoe, North	17	220 55	107 08	59	.....
Simcoe, South-West	17	232 96	108 90	87	2
Stormont	12	177 72	88 84	75	.....
Sudbury and Nipissing in part	18	317 80	128 90	42	3
Thunder Bay, West	.....	.....	.....	36	.....
Timiskaming, Centre	14	296 05	111 41	50	1
Timiskaming, North and Algoma North	1	35 00	10 00	30	1
Timiskaming South and Nipissing in part	2	29 75	14 87	44	.....
Victoria, West	25	358 04	163 68	72	.....
Waterloo, North	12	178 03	75 50	40	.....
Waterloo, South	12	184 98	76 92	42	.....
Welland, North	12	182 13	83 06	35	.....
Welland, South	10	140 48	63 67	42	.....
Wellington, North	9	158 07	67 45	68	.....
Wellington, South	23	298 57	148 72	68	.....
Wentworth	46	612 97	286 86	68	1
York, North, No. 1	46	523 25	261 61	65	.....
York, No. 3	16	365 70	136 25	49	.....
York, No. 4	6	123 34	51 78	11	.....
York, No. 2	18	239 15	116 98	39	.....
R. C. Separate Schools:					
Inspector Bennett	8	86 44	41 50	13	2
" Finn	23	302 81	145 36	44	.....
" Gratton	3	38 84	18 64	11	2
" Jones	10	150 12	67 05	23	.....
" Lee	27	354 43	159 20	43	.....
" Power	.....	.....	.....	1	.....
" Quarry	26	341 51	141 47	42	12
" Sullivan	7	89 06	40 44	19	.....
" Walsh	5	62 27	29 89	7	2
Acting Inspector Beneteau	3	50 03	22 29	19	.....
Totals, 1920-21	1,286	18,125 48	8,310 06	5,602	33
Totals, 1919-20	1,189	16,770 19	8,458 55	5,512	10
Increases	97	1,355 29	.....	90	23
Decrease	.....	.....	148 49	.....	.....

APPENDIX O

CADET CORPS, 1921

Collegiate Institutes, High, Public and Separate Schools having Cadet Corps with at least twenty members between the ages of 12 and 18 years in the case of Public and Separate Schools, and between 16 and 18 years in other cases.

Collegiate Institutes: Barrie, Brockville, Chatham, Clinton, Cobourg, Collingwood, Fort William, Galt, Goderich, Guelph, Hamilton, Ingersoll, Kingston, Kitchener, London, Lindsay, Napanee, Niagara Falls, North Bay, Orillia, Ottawa (2), Owen Sound, Perth, Peterborough, Picton, Port Arthur, Renfrew, St. Thomas, St. Mary's, Sarnia, Seaforth, Smith's Falls, Stratford, Strathroy, Toronto (Harbord, Humberside, Jarvis, Malvern, Oakwood, Parkdale, Riverdale), Windsor and Woodstock. Total 44.

High Schools: Alexandria, Arnprior, Athens, Belleville, Brampton, Fergus, Gananoque, Georgetown, Haileybury, Harriston, Kenora, Kincardine, Leamington, Listowel, London Technical, Lucan, Markdale, Meaford, Mount Forest, Norwich, Orangeville, Oshawa, Parry Sound, Port Hope, Port Perry, Prescott, Sault Ste. Marie, Tillsonburg, Toronto (Commerce and Technical), Trenton, Uxbridge, Wallaceburg, Winchester. Total 34.

Public Schools: No. 5 Ancaster, Arthur, Aylmer, Barrie (3), Belleville (3), Brockville, Chatham (3), Dundas, Dresden, Fort Frances, Hamilton (21), Keewatin, Kenora, Kitchener (2), London (11), Millbrook, Niagara Falls, Orangeville, Ottawa (9), Paris, Peterborough (4), Port Arthur (5), Port Hope, St. Catharines (5), St. Thomas (6), Stratford (5), Sudbury, Tamworth Consolidated, Teeswater, Toronto (62), No. 7 York, No. 27 York. Total 158.

Continuation School: Southampton.

R. C. Separate Schools: Hamilton (5), London, and Toronto (18). Total 24.

Total number of Cadet Corps, 261.

APPENDIX P

SUPERANNUATED TEACHERS

(Ryerson Superannuation Scheme)

Summary for Years 1882-1921

Year	Number of Teachers on List	Expenditure for the Year	Gross Contributions to the Fund	Amount Refunded to Teachers or to the Estates of Teachers
		$ c.	$ c.	$ c.
1882	422	51,000 00	13,501 08	3,660 10
1887	454	58,295 33	1,489 00	3,815 80
1892	456	63,750 00	1,313 50	786 86
1897	424	62,800 33	847 00	620 27
1902	407	64,244 92	1,073 50	722 78
1907	375	63,018 55	766 00	764 54
1912	297	†52,696 90	† 504 65	†443 01
1917	245	†48,232 00	†353 60	†810 92
1919	204	†40,697 50	† 9 00	†503 90
1920	196	†65,957 20	†14 00	†107 76
1921	177	†61,417 50	†27 00	.....

The annual allowance to each Superannuated Teacher was increased by the Legislature in 1920. Payments are at the rate of $11 per year of service instead of at $6 as formerly.

† For fiscal year ending 31st October.

APPENDIX Q

FINANCIAL STATEMENT OF THE ONTARIO COLLEGE OF EDUCATION

Financial Statement for the Year Ended 30th June, 1921

Receipts

Fees:		
Teachers in training	$2,026 00	
Pupils in University Schools	25,089 00	
		$27,115 00

Expenditures

Salaries—(detailed below)		$105,457 50
Maintenance of Building:		
Fuel	$3,591 78	
Light	856 14	
Water	381 66	
Caretaker's supplies	600 04	
Cleaning	2,519 70	
Repairs and renewals	1,882 91	
Engineer and caretaker	1,600 00	
Firemen	581 10	
		$12,013 33
Maintenance of Department:		
Practice-teaching in City Schools	$1,000 00	
Observation in rural schools	327 65	
Installation of Household Science Course, equipment, etc.	7,974 96	
Office expenses, printing, postage, class-room supplies and apparatus, and sundries	4,891 24	
Laboratory Assistance	102 60	
Messenger service	500 00	
		$14,796 45
		$132,267 28

Toronto,
30 January, 1922.

Certified correct.
F. A. MOURÉ, *Bursar.*

Details of Salaries.

	Payment to Officer.	Superannuation reservation under 7 Geo. V, Cap. 58.
Professors, each 12 mos. to 30th June:		
W. Pakenham, Dean and Professor in School Administration, @ $6,000.00	$5,850 00	$150 00
H. J. Crawford, Classics, also Headmaster of University Schools, @ $5,220.00	5,089 50	130 50
P. Sandiford, Educational Psychology, @ $4,800.00	4,680 00	120 00
Assistant Professors, also Chief Instructors, University Schools, each 12 mos. to 30th June:		
G. A. Cornish, Science, @ $4,375.00	4,265 62	109 38
J. T. Crawford, Mathematics, @ $4,375.00	4,265 62	109 38
G. M. Jones, English and History, @ $4,375.00	4,265 62	109 38
W. C. Ferguson, Moderns, @ $4,190.00	4,085 25	104 75
F. E. Coombs, Elementary Education @ $4,190.00	4,085 25	104 75

Assistant Professors:		
W. E. Macpherson, Education, 9 mos to 30th June, @ $4,190.00 per annum	3,063 94	78 56
Miss L. L. Okley, Household Science and Supervisor of Women Students, 12 mos. to 30th June @ $3,000.00	2,925 00	75 00
Lecturers, each 12 mos. to 30th June:		
S. W. Perry, Art and Commercial Work, also Chief Instructor in University Schools, @ $3,875.00	3,778 13	96 87
A. N. Scarrow, Manual Training, also Instructor in University Schools, @ $3,560.00	3,471 00	89 00
Frank Halbus, Physical Training, also Instructor in University Schools, @ $2,625.00 (paid also in Gymnasium)	2,559 36	65 64
Miss A. E. Robertson, Instructor in Household Science, 9 mos. to 30th June, @ $2,500.00 per annum	1,828 13	46 87
Instructors in University Schools, each 12 mos. to 30th June:		
T. M. Porter, @ $3,875.00	3,778 13	96 87
H. A. Grainger, @ $3,875.00	3,778 13	96 87
W. J. Lougheed, @ $3,875.00	3,778 13	96 87
J. A. Irwin, @ $3,750.00	3,656 25	93 75
W. H. Williams, @ $3,750.00	3,656 25	93 75
J. O. Carlisle, @ $3,560.00	3,471 00	89 00
J. G. Workman, @ $3,560.00	3,471 00	89 00
G. N. Bramfitt, @ $3,250.00	3,168 75	81 25
G. A. Cline, @ $3,250.00	3,168, 75	81 25
W. L. C. Richardson, @ $3,250.00	3,168 75	81 25
N. L. Murch, @ $3,125.00	3,046 88	78 12
D. E. Hamilton, @ $3,125.00	3,046 88	78 12
E. L. Daniher, @ $2,810.00	2,739 75	70 25
P. Daniels, Substitute Instructor, University Schools, salary for 10 teaching months @ $200.00 per month	1,950 00	50 00
Miss L. Swinarton, Secretary, Dean's Office, 12 mos. to 30th June	1,400 00	.....
Miss Gladys Cotter, Clerk and Librarian, 4 mos to 1st November (resigned) @ $1,200.00 per annum	400 00	.....
Miss E. Fraser, Clerk in Headmaster's Office, 12 mos. to 30th June	1,000 00	.....
	102,891 07	2,566 43
		102,891 07
		$105,457 50

APPENDIX R

LIST OF INSPECTORATES AND INSPECTORS

Inspectorates	Public School Inspectors	Post Office
Algoma District in part; City of Sault Ste. Marie; Town of Bruce Mines	L. A. Green, B.A.	Sault Ste. Marie.
Brant and Norfolk in part; Town of Paris; Village of Waterford (Joint Inspectorate)	T. W. Standing, B.A.	Brantford.
Bruce, East; Towns of Chesley, Walkerton, Wiarton; Villages of Hepworth, Lion's Head Mildmay, Tara	John McCool, M.A.	Walkerton.
Bruce, West; Towns of Kincardine, Southampton; Villages of Lucknow, Paisley, Port Elgin, Teeswater, Tiverton	W. F. Bald, B.A., LL.B.	Port Elgin.
Carleton, East; Town of Eastview	T. P. Maxwell, B.A.	Ottawa.
Carleton, West and Lanark, East; Towns of Almonte, Carleton Place; Village of Richmond (Joint Inspectorate)	R. C. Rose, B.A.	Carleton Place.
Dufferin; Town of Orangeville; Villages of Grand Valley, Shelburne	W. R. Liddy, B.A.	Orangeville.
Dundas; Villages of Chesterville, Iroquois, Morrisburg, Winchester	Hiram B. Fetterly, M.A.	Winchester.
Elgin, East; Town of Aylmer; Villages of Springfield, Vienna	J. C. Smith, B.A.	St. Thomas.
Elgin, West; City of St. Thomas; Villages of Dutton, Rodney, Port Stanley, West Lorne (Joint Inspectorate)	John A. Taylor, B.A.	St. Thomas.
Essex; Towns of Amherstburg, Essex, Ford, Kingsville, Leamington; Villages of Belle River, St. Clair Beach	D. A. Maxwell, B.A., LL.B., Ph.D.	Kingsville.
Essex, North (in part only)	V. C. Quarry, B.A.	Parkhill, R. R. 8.
Frontenac, South; Villages of Garden Island, Portsmouth	S. A. Truscott, M.A.	Kingston.
Frontenac, North, and Addington (Joint Inspectorate)	M. R. Reid, M.A.	Sharbot Lake.
Glengarry; Town of Alexandria; Villages of Lancaster, Maxville	J. W. Crewson, B.A.	Alexandria.
Grey, East; Towns of Meaford, Thornbury; Village of Flesherton	Samuel Huff, B.A., B.Paed.	Meaford.
Grey, West; City of Owen Sound; Villages of Chatsworth, Shallow Lake	H. H. Burgess, B.A.	Owen Sound.
Grey, South; Towns of Durham, Hanover; Villages of Dundalk, Markdale, Neustadt	Robert Wright, B.A.	Hanover.
Haldimand; Town of Dunnville; Villages of Caledonia, Cayuga, Hagersville, Jarvis	J. L. Mitchener, B.A.	Cayuga.
Haliburton and E. Muskoka; Town of Huntsville	Geo. E. Pentland, M.A.	Fenelon Falls.
Halton and Wentworth in part; Towns of Burlington, Georgetown, Milton, Oakville; Village of Acton, (Joint Inspectorate)	James M. Denyes, B.A.	Milton.
Hastings Centre; Villages of Deloro, Madoc, Marmora, Stirling, Tweed	J. E. Minns, B.A.	Tweed.
Hastings South, and City of Belleville; Towns of Deseronto, Trenton; Village of Frankford (Joint Inspectorate)	H. J. Clarke, B.A.	Belleville.
Hastings, North; Village of Bancroft	Jas. Colling, B.A.	Bancroft.
Huron, East; Towns of Clinton, Seaforth, Wingham; Villages of Blyth, Brussels, Wroxeter	John M. Field, B.A., Ph.D.	Goderich.
Huron, West; Town of Goderich; Villages of Bayfield, Exeter, Hensall	J. Elgin Tom	Goderich.
Kenora District, in part, Thunder Bay District (East) and Algoma District in part; City of Fort William; Towns of Dryden, Sioux Lookout (Joint Inspectorate)	W. J. Hamilton, B.A.	Fort William.

List of Inspectorates and Inspectors (Continued)

Inspectorates	Public School Inspectors	Post Office
Kent, East; Towns of Blenheim, Bothwell, Dresden, Ridgetown; Villages of Erieau, Highgate, Thamesville	Rev. W. H. G. Colles	Chatham.
Kent, West, and City of Chatham; Towns of Tilbury, Wallaceburg; Village of Wheatley (Joint Inspectorate)	J. H. Smith, M.A	Chatham.
Lambton, East (No. 2); Town of Petrolia; Villages of Alvinston, Arkona, Oil Springs, Watford	N. McDougall, B.A	Petrolia.
Lambton, West (No. 1); City of Sarnia; Town of Forest; Villages of Courtright, Point Edward, Thedford, Wyoming (Joint Inspectorate)	Henry Conn, B.A	Sarnia.
Lanark, West; Towns of Perth, Smith's Falls; Village of Lanark (Joint Inspectorate)	Thos. C. Smith, M.A	Perth.
Lanark, East (see Carleton West).		
Leeds and Grenville (No. 1); Town of Gananoque; Villages of Newboro, Westport	James F. McGuire, M.A	Westport.
Leeds and Grenville (No. 2); Town of Brockville; Village of Athens (Joint Inspectorate)	W. C. Dowsley, M.A	Brockville.
Leeds and Grenville (No. 3); Town of Prescott; Villages of Cardinal, Kemptville, Merrickville (Joint Inspectorate)	T. A. Craig	Kemptville.
Lennox; Town of Napanee; Villages of Bath, Newburgh (see also Frontenac, North)	E. J. Corkill, B.A	Napanee.
Lincoln, Towns of Meritton, Niagara; Villages of Beamsville, Grimsby, Port Dalhousie	Geo. A. Carefoot, B.A., B.Paed.	St. Catharines.
Manitoulin Dist.; Algoma Dist. in part; Sudbury Dist. in part; Towns of Blind River, Gore Bay, Little Current, Thessalon	James W. Hagan, M.A	Gore Bay.
Middlesex, East; Village of Lucan	P. J. Thompson, B.A	London.
Middlesex, West; Towns of Parkhill, Strathroy; Villages of Ailsa Craig, Glencoe, Newbury, Wardsville	H. D. Johnson	Strathroy.
Muskoka, South and West, District; Towns of Bala, Bracebridge, Gravenhurst; Village of Port Carling	H. R. Scovell, B.A	Bracebridge.
Muskoka, East (see Haliburton).		
Muskoka, North (see Parry Sound, East)		
Nipissing, (see Timiskaming South Dist.)		
Norfolk; Town of Simcoe; Villages of Delhi, Port Dover, Port Rowan (see Brant Co.)	H. Frank Cook, B.A	Simcoe.
Northumberland and Durham, West, No. 1; Towns of Bowmanville, Port Hope; Village of Newcastle	E. E. Snider, B.A	Port Hope.
Northumberland and Durham, Centre, No. 2; Town of Cobourg; Village of Millbrook	J. W. Odell, B.A	Cobourg.
Northumberland and Durham, East, No. 3; Town of Campbellford; Villages of Brighton Colborne, Hastings	Robert Boyes	Campbellford.
Ontario, North; Town of Uxbridge; Villages of Beaverton, Cannington	T. R. Ferguson, M.A	Uxbridge.
Ontario, South; Towns of Oshawa, Whitby; Village of Port Perry	R. A. Hutchison, B.A	Whitby.
Oxford, North, and City of Woodstock; Villages of Embro, Tavistock (Joint Inspectorate)	J. M. Cole	Woodstock.
Oxford, South; Towns of Ingersoll, Tillsonburg; Village of Norwich (Joint Inspectorate)	R. A. Patterson, B.A	Ingersoll.

List of Inspectorates and Inspectors (Continued)

Inspectorates	Public School Inspectors	Post Office
Parry Sound, South, District; Town of Parry Sound; Village of Magnetawan	J. L. Moore, B.A.	Parry Sound.
Parry Sound, East, District; Muskoka North; Towns of Kearney, Powassan, Trout Creek; Villages of Burk's Falls, South River, Sundridge	R. O. White	North Bay.
Peel; Town of Brampton; Villages of Bolton, Port Credit, Streetsville	W. J. Galbraith, M.A.	Brampton.
Perth, North; Towns of Listowel, Mitchell, St. Mary's; Village of Milverton	William Irwin, B.A.	Stratford.
Perth, South, and City of Stratford (Joint Inspectorate)	James H. Smith, B.A.	Stratford.
Peterborough, East; Villages of Havelock, Lakefield, Norwood	Richard Lees, M.A.	Peterborough.
Peterborough, West, and Victoria, East; Town of Lindsay; Villages of Bobcaygeon, Omemee (Joint Inspectorate)	G. E. Broderick	Lindsay.
Prescott and Russell; Towns of Hawkesbury, Rockland, Vankleek Hill; Villages of Casselman, L'Orignal	John Nelson, B.A.	Vankleek Hill.
Prince Edward; Town of Picton; Villages of Bloomfield, Wellington	F. P. Smith, M.A.	Picton.
Rainy River District, and Kenora District in part; Towns of Fort Frances, Keewatin, Kenora, Rainy River	Samuel Shannon, B.A.	Kenora.
Renfrew, North; Town of Pembroke; Village of Cobden	I. D. Breuls, B.A.	Pembroke.
Renfrew, South; Towns of Arnprior, Renfrew; Villages of Eganville, Killaloe Station	G. G. McNab, M.A.	Renfrew.
Simcoe, North; Towns of Barrie, Collingwood, Penetanguishene	Joseph L. Garvin, B.A.	Barrie.
Simcoe, South; Towns of Alliston, Stayner; Villages of Beeton, Bradford, Creemore, Tottenham	Edwin Longman	Barrie.
Simcoe, East; Towns of Midland, Orillia; Villages of Coldwater, Port McNicol, Victoria Harbour	Isaac Day, B.A.	Orillia.
Stormont; Town of Cornwall; Village of Finch	James Froats, M.A., B.Paed.	Finch.
Sudbury District in part; Towns of Capreol Copper Cliff, Massey, Sudbury, Webbwood	D. M. Christie, B.A.	Sudbury.
Thunder Bay District West; City of Port Arthur	John Ritchie	Port Arthur.
Timiskaming, Central; Towns of Charlton, Englehart, Haileybury, New Liskeard; Village of Thornloe	W. Asbury Wilson, B.A.	Haileybury.
Timiskaming, North; Algoma (in part); Towns of Cochrane, Iroquois Falls, Kapuskasing, Matheson, Timmins	D. T. Walkom, B.A.	Cochrane.
Timiskaming District, South; Nipissing; Towns of Bonfield, Cache Bay, Cobalt, Latchford, Mattawa, North Bay, Sturgeon Falls	P. W. Brown, B.A.	North Bay.
Victoria, West; Villages of Fenelon Falls, Sturgeon Point, Woodville	W. H. Stevens, B.A.	Lindsay.
Victoria, East (see Peterborough West).		
Waterloo, N. (No. 1); City of Kitchener; Town of Waterloo; Village of Elmira (Joint Inspectorate)	F. W. Sheppard	Kitchener.
Waterloo, S. (No. 2); City of Galt; Towns of Hespeler, Preston; Villages of Ayr, New Hamburg (Joint Inspectorate)	Lambert Norman, B.A.	Galt.

List of Inspectors and Inspectorates (Continued)

Inspectorates	Public School Inspectors	Post Office
Welland, North; City of Welland; Town of Thorold; Villages of Chippawa, Fonthill (Joint Inspectorate)	John W. Marshall, B.A.	Welland.
Welland, South; Towns of Bridgeburg, Port Colborne; Villages of Fort Erie; Humberstone	James McNiece, B.A.	Welland.
Wellington, North; Towns of Harriston, Mount Forest, Palmerston; Village of Clifford	Robt. Galbraith, B.A.	Mount Forest.
Wellington, South; Villages of Arthur, Drayton, Elora, Erin, Fergus	J. J. Craig, B.A.	Fergus.
Wentworth; Town of Dundas; Village of Waterdown	Jno. B. Robinson, B.A., B.Paed	Hamilton.
York, No. 1; Towns of Aurora, Newmarket; Villages of Holland Landing, Sutton West.	C. W. Mulloy, B.A.	Aurora.
York, No. 2; Towns of Mimico, New Toronto, Weston; Village of Woodbridge	A. L. Campbell, M.A.	Weston.
York, No. 3; Villages of Markham, Richmond Hill, Stouffville	W. W. A. Trench, B.A.	Richmond Hill.
York, No. 4; Town of Leaside	A. A. Jordan, B.A.	Toronto, 63 Orchard View Boulevard.
Brantford, City of	E. E. C. Kilmer, B.A.	Brantford.
Guelph, do	Wm. Tytler, B.A.	Guelph.
Hamilton, do	W. H. Ballard, M.A.	Hamilton.
do do	Jas. Gill, B.A., B.Paed.	Hamilton.
do do	A. W. Morris, M.A.	Hamilton.
do do	Frank E. Perney, B.A., B.Paed.	Hamilton.
Kingston, do	J. Russell Stuart	Kingston.
London, do	V. K. Greer, M.A.	London.
Niagara Falls, do, and St. Catherines	D. C. Hetherington	St. Catherines.
Ottawa, do	J. H. Putman, B.A., D.Paed.	Ottawa.
do do	E. T. Slemon, B.A., D.Paed.	Ottawa.
Peterborough, do	A. Mowat, B.A.	Peterborough.
Toronto, do	R. H. Cowley, M.A., Chief Inspector	Toronto.
do do	W. H. Elliott, B.A.	Toronto.
do do	Jos. W. Rogers, M.A.	Toronto.
do do	Geo. H. Armstrong, M.A., B. Paed.	Toronto.
do do	D. D. Moshier, B.A., B.Paed.	Toronto.
do do	N. S. MacDonald, B.A., D.Paed.	Toronto.
do do	Walter Bryce, B.A.	Toronto.
do do	Miss A. E. Marty, M.A., LL.D.	Toronto.
Windsor, do Sandwich and Walkerville Towns	J. E. Benson, M.A.	Windsor.

R. C. Separate School Inspectors

J. F. Powers, M.A. ..... Toronto, 33 Dalton Rd.
J. F. Sullivan, B.A. ..... London, 873 Hellmuth Ave.
Jas. E. Jones, B.A. ..... Ottawa, 104 Henderson Ave.
J. P. Finn, B.A. ..... Peterborough.
W. J. Lee, B.A. ..... Toronto, 434 Brunswick Ave.
J. M. Bennett, B.A. ..... Toronto, 47 Browning Ave.
Vincent C. Quarry, B.A ..... Parkhill, R. R. 8.
Thomas S. Melady ..... Stratford.

English-French Public and Separate School Inspectors

J. S. Gratton ..... Toronto, 280 Jarvis St.
Jno. C. Walsh, B.A. ..... Ottawa, 72 Sweetland Ave.
James Scanlan, B.A. ..... Toronto, 626 Euclid Ave.
Joseph Lapansee, B.A. ..... Plantagenet.

Public and Separate Schools

John Waugh, M.A., D.Paed., Chief Insp. ..Toronto, Parliament Buildings.
W. I. Chisholm, M.A., Assistant ..... Toronto, Parliament Buildings.
J. B. McDougall, B.A., D.Paed., Asst. ..... North Bay.

List of Inspectors and Inspectorates (Concluded)

Director of Industrial and Technical Education

F. W. Merchant, M.A., D.Paed.....Toronto, Parliament Buildings.

Director of Professional Training

S. A. Morgan, B.A., D.Paed.....Toronto, Parliament Buildings.

High School Inspectors

J. A. Houston, M.A.....Toronto, 105 Roxborough St. W.
I. M. Levan, B.A.....Toronto, 144 Balmoral Ave.
Geo. F. Rogers, B.A.....Toronto, 104 Glencairn Ave.

Continuation School Inspectors

G. K. Mills, B.A.....Toronto, Parliament Buildings.
J. P. Hoag, B.A.....Toronto, Parliament Buildings.

Manual Training and Household Science Inspector

Albert H. Leake.....Toronto, Parliament Buildings.

Inspector of Elementary Agricultural Education

J. B. Dandeno, B.A., Ph. D.....Toronto, 13 Hazelton Ave.

Inspector of Auxiliary Classes

S. B. Sinclair, M.A., Ph. D.....Toronto, Parliament Buildings.

January, 1922.

APPENDIX S

EXAMINATIONS

I. JUNIOR HIGH SCHOOL ENTRANCE EXAMINATION, 1921

Collegiate Institutes	Number granted certificates on Principal's recommendation	Number taking Departmental Examination	Number passed Departmental Examination	High Schools	Number granted certificates on Principal's recommendation	Number taking Departmental Examination	Number passed Departmental Examination
Barrie	.....	106	91	Alexandria	.....	84	72
Brantford	248	73	31	Alliston	.....	46	36
Brockville	53	117	94	Almonte	.....	67	52
Chatham	83	112	64	Amherstburg	.....	66	59
Clinton	.....	59	42	Arnprior	.....	89	71
Cobourg	.....	107	85	Arthur	.....	75	58
Collingwood	.....	70	63	Athens	.....	68	43
Fort William	.....	206	190	Aurora	.....	80	64
Galt	.....	228	211	Avonmore	.....	28	13
Goderich	.....	82	66	Aylmer	.....	96	61
Guelph	116	64	51	Beamsville	.....	30	19
Hamilton	624	202	106	Belleville	75	36	20
Ingersoll	.....	83	79	Bowmanville	.....	62	56
Kingston	136	136	81	Bracebridge	.....	99	62
Kitchener-Waterloo	.....	297	280	Bradford	.....	46	37
Lindsay	.....	147	129	Brampton	.....	100	87
London	402	232	155	Brighton	.....	36	25
Morrisburg	.....	38	32	Burlington	.....	61	55
Napanee	.....	111	89	Caledonia	.....	70	51
Niagara Falls	.....	129	113	Campbellford	.....	68	50
North Bay	.....	146	128	Carleton Place	.....	78	65
Orillia	.....	137	113	Cayuga	.....	43	30
Ottawa	513	489	350	Chatsworth	.....	53	45
Owen Sound	.....	250	220	Chesley	.....	57	50
Perth	.....	101	83	Chesterville	.....	32	18
Peterborough	150	115	79	Colborne	.....	30	26
Picton	.....	77	60	Cornwall	.....	140	122
Port Arthur	.....	221	176	Deseronto	25	15	6
Renfrew	.....	134	106	Dundalk	.....	44	34
St. Catharines	.....	177	142	Dundas	.....	120	86
St. Mary's	.....	118	102	Dunnville	.....	83	57
St. Thomas	.....	259	210	Durham	.....	58	50
Sarnia	.....	242	205	Dutton	.....	57	43
Seaforth	.....	84	77	Elora	.....	60	32
Smith's Falls	.....	132	102	Essex	.....	92	62
Stratford	.....	300	242	Exeter	.....	44	36
Strathroy	.....	119	79	Fergus	.....	95	68
Toronto, Harbord	.....	192	94	Flesherton	.....	31	22
Toronto, Parkdale	.....	108	36	Forest	.....	82	63
Toronto, Jarvis	.....	106	45	Fort Frances	.....	58	52
Toronto, Humberside	.....	68	25	Gananoque	.....	63	61
Toronto, Malvern Ave.	.....	48	13	Georgetown	.....	29	26
Toronto, Oakwood	.....	124	45	Glencoe	.....	61	54
Toronto, Riverdale	.....	124	45	Gravenhurst	.....	29	23
Toronto	3,613	.....	.....	Grimsby	.....	64	39
Vankleek Hill	.....	102	63	Hagersville	.....	49	39
Windsor	393	69	67	Haileybury	.....	78	61
Woodstock	.....	194	169	Harriston	.....	47	37
				Hawkesbury	.....	29	22
Totals	6,331	6,835	5,128	Iroquois	.....	31	21
				Kemptville	.....	70	50
				Kenora	.....	79	70
				Kincardine	.....	74	53

JUNIOR HIGH SCHOOL ENTRANCE EXAMINATION, 1921 (Continued)

High Schools—Con.	Number granted certificate on Principal's recommendation	Number taking Departmental Examination	Number passed Departmental Examination
Leamington		98	89
Listowel		95	68
Lucan		92	74
Madoc		69	52
Markdale		40	36
Markham		53	36
Meaford		76	52
Midland		81	72
Milton		106	85
Mitchell		111	80
Morewood		17	12
Mount Forest		74	50
Newburgh		46	35
Newcastle		15	15
Newmarket		80	66
Niagara		21	17
Niagara Falls South		74	63
Norwood		48	36
Oakville		72	60
Omemee		39	24
Orangeville		44	39
Oshawa		130	122
Paris		75	60
Parkhill		45	36
Parry Sound		90	73
Pembroke		160	115
Penetanguishene		66	56
Petrolia		78	65
Plantagenet		40	25
Port Dover		26	25
Port Elgin		56	38
Port Hope		79	72
Port Perry		34	29
Port Rowan		38	31
Prescott		66	48
Richmond Hill		33	22
Ridgetown		68	52
Rockland		39	33
Sault Ste. Marie	24	176	114
Shelburne		38	29
Simcoe		126	107
Smithville		38	31
Stirling		78	48
Streetsville		36	27
Sudbury		77	62
Sydenham		55	32
Thorold		55	53
Tillsonburg		66	57
Trenton	48	20	10
Tweed		80	60
Uxbridge		63	50
Vienna		33	17
Walkerton		50	40
Wallaceburg		93	77
Wardsville		15	11
Waterdown		69	49
Waterford		60	51
Watford		50	45
Welland		87	78
Weston	116	73	45
Whitby		73	56
Wiarton		64	39
Williamstown		32	31
Winchester		54	44
Wingham		67	59
Totals	338	7,482	5,799
Other Places			
Aberfoyle		35	34
Acton		33	33
Agincourt		54	41
Ailsa Craig		22	13
Alvinston		34	24
Ameliasburg		36	27
Ancaster		56	46
Angus		20	11
Apsley		16	7
Arkona		25	17
Ashton		13	7
Aultsville		15	11
Ayr		25	23
Ayton		21	20
Bailieboro'		20	14
Bancroft		62	46
Barriefield		33	24
Bath		19	19
Battersea		21	7
Bayfield		11	8
Beachburg		70	34
Beaverton		39	26
Beeton		20	14
Belleville, Co. Centre	66	45	27
Belle River		25	17
Belmont		25	22
Bethany		14	9
Billings' Bridge		17	6
Binbrook		12	5
Bisco		6	1
Blackstock		18	14
Blenheim		70	60
Blind River		34	27
Bloomfield		22	18
Blyth		43	31
Bobcaygeon		28	26
Bolton		30	22
Bothwell		29	16
Bowesville		12	7
Bridgeburg		42	42
Bridgen		38	26
Bruce Mines		23	11
Brussels		49	48
Burford		44	27
Burgessville		24	19
Burk's Falls		30	19
Burridge		13	8
Burritt's Rapids		6	3

JUNIOR HIGH SCHOOL ENTRANCE EXAMINATION, 1921 (Continued)

Other Places—Con.	Number granted certificates on Principal's recommendation	Number taking Departmental Examination	Number passed Departmental Examination	Other Places—Con.	Number granted certificates on Principal's recommendation	Number taking Departmental Examination	Number passed Departmental Examination
Byng Inlet		6	1	Edgar		7	7
Caistor Centre		10	8	Egansville		45	37
Callander		7	4	Elk Lake		5	....
Cannington		14	10	Elmira		46	35
Cardinal		38	22	Elmvale		44	35
Cargill		32	24	Embro		35	30
Carp		19	15	Embrun		13	13
Castleton		18	14	Emo		36	18
Cataraqui		41	17	Englehart		27	12
Cedarville		17	13	Ennismore		12	12
Chalk River		9	9	Erin		44	29
Chapleau		29	23	Espanola		16	13
Charleston		31	22	Fairbank		19	19
Charlton		13	4	Fenelon Falls		50	37
Claremont		29	17	Fenwick		18	18
Clifford		20	16	Feversham		31	13
Cobalt		45	45	Fingal		61	39
Cobden		73	32	Flinton		9	6
Coboconk		32	10	Florence		35	22
Cochrane		20	20	Fonthill		24	18
Coldstream		28	20	Fordwich		25	22
Coldwater		24	19	Fournier		25	12
Comber		39	26	Frankford	8	17	11
Coniston		30	26	Galetta		24	16
Cookstown		30	26	Glencoe		61	54
Copper Cliff		21	21	Gore Bay		61	42
Courtright		23	9	Gowganda		2	2
Crediton		16	16	Grand Valley		49	47
Creemore		40	33	Haliburton		20	17
Creighton Mine		12	12	Hall's Bridge		3	3
Crosshill		24	15	Hamilton, Co. Centre		71	57
Cultus		15	10	Hanover		52	49
Cumberland		13	11	Harrow		44	33
Cutler		20	14	Harrowsmith		20	5
Dalkeith		22	18	Hastings		22	15
Dashwood		25	10	Havelock		33	22
Delaware		19	19	Hawkestone		35	15
Delhi		42	30	Hearst		7	5
Delta		62	45	Hensall		26	22
Demorestville		19	15	Hepworth		19	10
Denbigh		10	9	Highgate		34	30
Dickinson's Landing		25	14	Hillsdale		12	8
Dixon's Corners		21	12	Horning's Mills		12	11
Dorchester Station		68	51	Huntsville		61	49
Douglas		26	22	Ignace		6	1
Drayton		36	28	Innerkip		20	13
Dresden		56	48	Iroquois Falls		18	13
Dromore		19	16	Ivy		13	13
Drumbo		24	24	Janetville		10	8
Dryden		35	18	Jarvis		32	28
Dungannon		24	21	Jasper		23	15
Dunsford		14	14	Jockvale		3	2
Eastview		34	24	Kars		6	6
Easton's Corners		15	9	Kearney		16	3
Echo Bay		14	2	Keene		43	30
Echo Place		86	71	Keewatin		18	10
Edith Cavell	19	75	60	Kenmore		19	13

JUNIOR HIGH SCHOOL ENTRANCE EXAMINATION, 1921 (Continued)

Other Places.—Con.	Number granted certificate on Principal's recommendation	Number taking Departmental Examination	Number passed Departmental Examination
Killaloe Station		37	26
Killarney		2	2
Kilmaurs		23	17
Kimberley		19	13
Kinburn		24	21
King		16	13
Kingsville		46	37
Kinmount		15	8
Kintail		18	14
Kirkfield		35	19
Lakefield		61	43
Lanark		79	61
Lancaster		28	22
Lansdowne		45	28
Laurel		18	14
Lemonville		22	15
Lion's Head		27	17
Little Britain		22	12
Little Current		20	20
London, East		130	112
Loring		12	5
Lucknow		32	24
Macdonald Consolidated, Guelph		39	27
McKellar		15	9
McLennan		22	9
Madawaska		13	8
Magnetawan		14	8
Manitowaning		21	18
Manley		16	10
Manotick		25	20
Maple	21	28	18
Marmora		43	30
Marshville		17	16
Marsville		11	8
Massey		18	16
Matheson		7	7
Mattawa		23	15
Maxville		40	37
Medina		8	8
Melbourne		24	17
Merivale		6	14
Merlin		6	37
Merrickville		24	19
Merritton		24	12
Metcalfe		26	14
Mildmay		29	21
Milford		28	15
Millbrook		37	23
Milverton		75	52
Mimico	61	50	29
Minaki		6	3
Minden		17	15
Mindemoya		14	11
Minesing		12	8
Monklands		13	10

Other Places.—Con.	Number granted certificate on Principal's recommendation	Number taking Departmental Examination	Number passed Departmental Examination
Monteith		15	13
Moorefield		27	21
Moose Creek		12	6
Mount Albert		27	22
Mount Brydges		19	14
Mount Elgin		30	24
Mount Hope		22	17
Mount Pleasant		41	33
Mount St. Patrick		26	21
Mountain Grove		11	5
Mountain Station		24	16
Navan		22	20
Neustadt		12	12
Newboro'		42	29
New Hamburg		46	31
Newington		22	14
New Liskeard		64	37
Nipissing		5	5
North Augusta		26	14
North Gower		26	22
North Lancaster		28	25
Norwich		50	34
Oakwood		22	17
Odessa		21	16
Oil Springs		46	35
Orono		42	23
Oshweken		16	6
Osgoode Station		21	18
Otterville		22	15
Paisley		41	30
Pakenham		27	19
Palmerston		32	27
Pefferlaw		8	7
Pelee Island		7	3
Pickering		28	19
Plattsville		23	20
Port Burwell		17	14
Port Carling		20	10
Port Colborne		50	45
Port Credit		59	47
Port Dalhousie		62	52
Port Stanley		15	15
Powassan		37	14
Priceville		15	14
Princeton		18	15
Queensville		14	12
Rainy River		22	18
Ramsayville		14	10
Randwick		13	11
Richards' Landing		12	3
Richmond		33	22
Ridgeway		42	35
Ripley		42	36
Rockton		25	12
Rockwood		27	22
Rodney		55	45

JUNIOR HIGH SCHOOL ENTRANCE EXAMINATION, 1921 (Concluded)

Other Places—Con.	Number granted certificate on Principal's recommendation	Number taking Departmental Examination	Number passed Departmental Examination
Rosemont		17	11
Roseneath		15	10
Rosseau		2	2
Russell		24	13
St. Davids		14	6
St. George		30	26
St. Helens		21	14
Sandwich		89	68
Schomberg		32	26
Schrieber		34	24
Scotland		33	28
Secord School (York Co.)		81	71
Selkirk		32	23
Sharbot Lake		27	9
Sioux Lookout		10	10
Singhampton		19	13
Smooth Rock Falls		8	6
Solina		15	11
Southampton		21	20
South Finch		59	41
South Indian		6	4
South Mountain		23	21
South Porcupine		12	11
South River		11	6
Sparta		23	16
Spencerville		44	27
Springfield		27	21
Sprucedale		17	8
Stayner		35	22
Stella		5	4
Stevensville		17	12
Stittsville		19	15
Stony Crreek		33	28
Stouffville		27	18
Strabane		16	14
Stroud		30	26
Sturgeon Falls		44	40
Sunderland		27	22
Sun Iridge		19	12
Sutton		48	38
Swastika		7	1
Tamworth		52	31
Tara		50	32
Tavistock		26	22
Teeswater		48	34
Thamesford		21	19
Thamesville		49	39
Thedford		27	19
Thessalon		38	34
Thornbury		67	38
Thorndale		45	34
Tilbury		27	23
Timmins		42	31
Tiverton		17	12
Toronto, De La Salle Institute		121	76
Tottenham		35	30
Uptergrove		49	36
Varna		12	7
Verona		26	16
Victoria Harbour		13	12
Vineland		39	25
Warkworth		30	17
Warren		20	10
Waubaushene		17	13
Webbwood		7	4
Wellandport		17	10
Wellington		23	14
Westboro'		101	69
Westfield		15	13
West Lorne		59	33
Westport		34	28
Wheatley		34	28
Whitevale		20	16
White River		3	3
Wilberforce		18	13
Wilkesport		30	12
Williamsburg		31	25
Willowdale		29	20
Winchelsea		21	15
Winona		29	28
Wolfe Island		18	8
Woodbridge	6	39	25
Woodville		40	28
Wooler		28	18
Worthington		17	8
Wroxeter		31	24
Wyoming		39	25
Yarmouth Heights		55	32
Zephyr		4	4
Zurich		20	17
Totals	181	10,352	7,483
Collegiate Institutes	6,331	6,835	5,128
High Schools	338	7,484	5,799
Other Places	181	10,352	7,483
Grand Totals, 1921	6,850	24,671	18,410

II. JUNIOR PUBLIC SCHOOL GRADUATION DIPLOMA EXAMINATION, 1921

Centre	Examined	Passed	High School Entrance allowed	Centre	Examined	Passed	High School Entrance Allowed
Alvinston	1	1		Ottawa	1.2	84	32
Angus	3	3		Pefferlaw	2	2	
Arkona	3	3		Pelee Island	3	1	
Aurora	1	1		Picton	1	1	
Bayfield	5	4	1	Plantagenet	2	1	1
Beachburg	30	24		Priceville	4	4	
Beamsville	5	2		Rainy River	1	1	
Beaverton	14	10	1	Renfrew	1	1	
Binbrook	4		1	Rodney	1	1	
Blenheim	1	1		Rosseau	4		
Bracebridge	14	8		St. Helen's	4	4	
Brigden	13	10	1	Schomberg	2	1	
Bruce Mines	2	1		Schreiber	10	8	
Burford	12	10	1	Seaforth	1	1	
Byng Inlet	7	5		Sioux Lookout	3	3	
Callander	4	1		Smithville	4	4	
Courtright	3	1	1	Smooth Rock Falls	2	2	
Crediton	13	7		South River	5	3	
Creighton Mine	3	3		Sparta	2	2	
Cumberland	3	2		Sunderland	8	8	
Dashwood	8	6		Sutton	2	2	
Dungannon	8	8		Sprucedale	7	5	
Dutton	6	4	1	Stony Creek	1	1	
Echo Bay	3	1	1	Strabane	7	7	
Emo	10	6	1	Tillsonburg	3	1	
Fairbank	7	6		Tiverton	5	5	
Feversham	1	1		Toronto	38	29	9
Fingal	2	2		Tweed	4	4	
Florence	12	11		Victoria Harbour	9	8	
Fort Frances	4	4		Waterdown	1	1	
Glencoe	2	1		Webbwood	1	1	
Hensall	10	7		Westfield	10	9	
Kearney	4			West Lorne	1	1	
Kimberley	5	3	2	Winchelsea	10	7	
Kingsville	17	16		Wingham	14	11	
Kinmount	4	3		Woodbridge	2	2	
Kintail	5	4	1	Woodstock	13	13	
Loring	2	1		Wooler	5	5	
McKellar	7	7		Worthington	2	2	
Magnetawan	4	4		Wyoming	1	1	
Mattawa	3			Zephyr	5	5	
Minaki	1	1		Zurich	9	5	
Minden	1	1					
Navan	5	2	1				
Nipissing	3	2					
Oakwood	2	2		Totals, 1921	622	430	55
Oil Springs	3	3					

APPENDIX T

LIST OF CERTIFICATES ISSUED BY THE DEPARTMENT OF EDUCATION, 1921

I. Public School Inspectors' Certificates

Evans, Josiah J., B.A., (Queen's)
Leitch, Alexander G., B.A., (Queen's)
Mathieson, Elsie, B.A., (Toronto)
Tucker, Mary C., M.A., (Toronto)

II. High School Principals' Certificates

Barton, Ambrose R., B.A.
Dobson, George C., B.A.
Elmslie, Wallace, B.A. (Mods. & History)
Fraser, Christine M., B.A.
Froats, Willis C. M.A. (Classics)
Gordon, James I., B.A.
Halpenny, D.Milton, B.A.
Hisey, Abraham, B.A. (Science)
Hitsman, Samuel A., B.A. (Commercial)
Jackson, J. Sanfield, B.A. (Science)
Keeling, Wilford Lorne, B.A.
Knowles, John H., B.A.
Lewis, Roy E., B.A.
MacPherson, Pearl, B.A. (Classics)
McCrimmon, Leon R., M.A. (Science)
McKillop, Archibald F., B.A. (Maths.)
McTurk, Isabel, B.A.
McWilliams, Walter A., B.A.
Manning, Ernest D., B.A.
Maxwell, Mabel I., B.A.
Milhausen, Albert J., B.A.
Morgan, Grace, B.A. (Mods. & Hist.)
O'Neill, Morgan J., M.A. (Maths. & Phys.)
Oates, Thomas W., B.A. (Commercial)
Park, Leonora, B.A.
Pugh, Harry C., B.A.
Ramage, George E., B.A. (Science)
Robb, George W., B.A., (Maths. & Phys.)
Rodden, Mary K., B.A.
Rogers, William C., M.A.
Rutherford, William H., M.A., D.Paed. (Maths.)
Smith, Wallace W., B.A.
Spencer, Watson G., B.A.
Steele, Walter S., B.A.
Stewart, Annie J., B.A.
Summerby, Fredrika, B.A.
Thomas, Neil J., B.A.
Thompson, Alva E. (Mr.) B.A. (Maths. & Phys.)
Waddell, Thomas K., B.A.
White, Lloyd, B.A.
Whitton, Frederick A., B.A. (Mods. & Hist)
Young, Ralph, B.A. (Science)

III. High School Assistants' and Specialists' Certificates

Abbot, Florence M.
Alderson, Bessie.
Anderson, Beatrice E. (Commercial)
Anglin, Sarah.
Armstrong, Emily, B.A. (Phys. C.)
Armstrong, Gladys W., B.A.
Armstrong, Mabel R.
Austin, Margery I., B.A. (Eng. & Hist.)
Ballantyne, George A., M.A. (Maths. & Phys.)
Barnby, Vera E. (Phys. C.)
Barton, Ambrose R., B.A. (Art and Phys.C.)
Baxter, Helen F., B.A.
Bayne, Mary G.
Beck, Clinton G., B.A. (Mods. & Hist., Fr. & Ger.)
Belcher, Norah T., B.A. (Phys.C.)
Bodkin, Gertrude L., B.A.
Bouchard, Mary A.C., B.A. (Mods. & Hist.)
Boyle, Margaret, B.A. (Eng. & Hist.)
Bridgman, Norma E., B.A. (Phys.C)
Brown, Mona.
Bryan, Cameron A.
Butcher, Cecil W., B.A. (Maths.)
Byfield, Gwendolyn C., B.A. (Phys.C.)
Cameron, James M., B.A. (Science)
Carr-Harris, Mrs. Marion, B.A.
Carscadden, Helen M.B., B.A.
Carter, George W., M.A.
Case, H. James. (Phys.C.)
Castleman, Hilda V., B.A.
Chisholm, Mrs. Jessie, B.A. (Mods. & Hist.)
Clark, Olive L., M.A. (Classics)
Cook, Ida M.
Cook, Marjorie, B.A. (Science)
Crough, Beatrice E.
Cummer, May E. (Commercial)
Currie, John E., B.A.
Davidson, Annie K., B.A. (Art)
Davidson, Viola M., B.A. (Science)
Devitt, Leslie K., (Phys. Cult.)
Dinsmore, Herbert B., B.A. (Phys. C.)
Dobson George C. (Phys. Cult.)
Dolbear, Callie C. (Art)
Dore, Harry C.
Dorrance, Annie V. (Art)
Durnin, Edward W., B.A. (Phys. C.)
Edgar, Margaret, B.A.
Ellis, George E., B.A.
Erb, William O., B.A. (Maths.& Phys.)
Ewing, Florence M., B.A. (Phys. C.)

III. High School Assistants' and Specialists' Certificates (Continued)

Ferguson, Arthur W., B.A. (Phys. C.)
Ferguson, Muriel B., (Art)
Ferguson, Stanley, B.A.
Fielding, Ewart L., B.A. (Phys. Cult.)
Filshie, Mrs. Lucille (Art)
Finch, Ethel B., B.A. (Mods. & Hist.)
Findlay, Edith C., B.A. (Ho. Science.)
Forbes, William B., (Phys. C.)
Franklin, Helen A., B.A. (Eng.& Hist.)
Fraser, Sadie, B.A.
Galbraith, Janet E.
Gartlan, Elizabeth, B.A.
Gendron, Muriel M., B.A.
Gordon, Mary M., (Phys. C.)
Goulding, Hanna M., (Phys. C.)
Graham, Annie, B.A.
Graham, Gladys M., B.A.
Gregory, Alice E., B.A. (Phys. C.)
Greig, Earl H., B.A. (Phys. C.)
Grieve, Bessie M.
Griffin, Elizabeth H., (Sr. St. Dorothy)
Hambly, Philo K., B.A., (Classics)
Hampson, Edward, B.A. (Commercial)
Hanbidge, Frances J., (Phys. C.)
Harper, Gertrude A., B.A., (Commercial)
Harris, Emarilla B.
Hartley, Floyd C., B.A. (Phys. C.)
Harty, Norma I.
Helmkay, Dora L., B.A. (Maths)
Helmkay, Iva B., (Maths)
Hill, Kenneth S., B.A.
Hill, Mary A.
Hind, Edith J., B.A. (Commercial)
Henry, Esther A., B.A. (Art)
Holley, Anna M.
Hood, Annie I., B.A.
Hooker, Ida A., B.A.
Houze, Margaret. (Art)
Howitt, Mary
Ireland, Norval J., B.A.
Irwin, Florence H., B.A. (Mods. & Hist.)
Johnson, Guy E., M.A.
Johnston, Mabel C., B.A. (Art)
Johnston, Wm. B., B.A. (Phys. C.)
Jones, Gwendolyn B., (Art)
Keeling, Wilford Lorne, B.A. (Phys. C.)
Kenyon, Grace, B.A., (Class.) (Eng. & Hist.)
Kilgour, Hugh B., B.A.
Knight, Florence I., B.A. (Phys. C.)
Lewis, Marjorie B., B.A.
Lewis, Roy E., B.A.
Lindsay, Bertie L., (Commercial)
MacDonald, Jessie H., B.A
MacLachlan, Isabella P., M.A.
MacLaurin, Mary L., B.A. (Eng. & Hist.)
MacNabb, Christina A. B.A.
McAllister, Annie G., (Phys. Cult.)
McCann, Dorothy.
McCoig, Mary A.
McConnell, Jean M., B.A.
McCullough, Charlotte S., B.A. (Science)
McDonnell, Margaret, B.A. (Sr. St. Clare)
McDougall, Jean L., B.A. (Eng. & Hist.)
McEown, Ruth, B.A.
McGregor, Helen J., (Art)
McIlraith, Margaret I., B.A.
McKechnie, Catriona S., (Phys. Cult.)
McKenna, Jessie, B.A. (Eng. & Hist.)
McLean, Helen G., B. A.
McLean, Lea N.
McLellan, Robert F., B.A.
McMaster, Maude H., B.A. (Eng. & Hist.)
McNair, Alice A., B.A.
McQuade, Gertrude V., B.A.
Macpherson, Jean M., B.A.
Martyn, Tena, (Phys. C.)
Mason, Edna W.H., B.A. (Mods. & Hist.)-(Phys. C.)
Matthews, Alma M., (Eng. & Hist.)
Millar, Margaret G., B.A.
Millar Maude, (Art) (Phys. C.)
Miller, Erle G.
Mitchell, Janet A., B.A. (Household Science)
Morgan, Grace, B.A. (Art)
Morgan, Pearl S., (Phys. C.)
Morris, Winnifred, (Art)
Morrow, Consuelo B., B.A.
Mowat, John A., (Eng. & Hist.)
Murray, Annie D., B.A. (Phys.C.)
Murray, Edith M., (Art)
Murtha, Ella T.
Nealon, Matthew J., B.A.
Newham, Eveline J., B.A. (Art)
O'Brien, Wilfred E.
O'Neill, Jessie, B.A. (Phys. Cult.)
O'Neill, Mary M., B.A. (Phys. C.)
O'Reilly, Bridget T., B.A. (Mods. & Hist.) (Phys. C.)
Ostrom, Luella E., B.A. (Art)
Payette, Henry J., B.A.
Pearson, Florence E., B.A.
Phillips, Fitzallan, B.A. (Maths. & Phys.)
Pigott, Margaret
Quinn, Mamie G., (Commercial) (Art)
Ramage, George E., B.A. (Phys. C.)
Ranson, Bertha M., (Phys. C.)
Reade, Jessie B., B.A. (Phys. C.)
Richardson, Lorne M., B.A.
Roach, Edith E., B.A. (Mods. & Hist.) (Phys. C.)
Robinson, Mary A., (Phys. C.)
Ross, Edith I., B.A.
Ross, Frances C., B.A. (Classics) (Phys. C.)
Roszel, John M.
Russell. Robert V.
Rutherford, Wilhelmina D., (Art)
Sanderson, Elizabeth M.
Sangster, Grace, B.A.
Shaw, Ory A., (Miss) M.A.
Sheridan, Eveline M., B.A. (Mods. & Hist.)
Shook, Muriel A., (Art)
Sinclair, Muriel G., B.A. (Ho. Science)
Sirrs, Elmer J.
Smith, Wallace W., B.A. (Phys. C.)
Stapleton, Louis J.
Stephens, James E., (Phys. C.)
Strachan, Donald L., B.A.

III. High School Assistants' and Specialists' Certificates (Continued)

Tanton, John, B.A. (Science)
Taylor, Pearl M.
Templar, Norah G.
Thompson, Howard E., (Phys. C.)
Thomson, Thomas M.
Tuck, Ella M., B.A. (Phys. C.)
Vandersluys, (Mr.) C.H., (Phys. C.)
Waterman, Isobel M.
Watson, Mabel A.,(Art)
West, John F., (Phys. C.)
Whelan, Anna M.
White, Edna M., (Art)
Wilson, Dorothy, B.A.
Woodcock, Mary S.

IV. Permanent Elementary Certificates

Abbott, Florence M. (Phys. Cult.)
Allan, Flora J., (Agriculture)
Allen, Lillian M., B.A. (Phys. Cult.)
Anderson, Beatrice E., (Phys. Cul..)
Ballantyne, George A., M.A. (Phys. Cult.)
Black, Clara E., (Art)
Bloomfield, Eva M.. (Agriculture)
Bole, Abbie, (Art)
Bouchard, Mary A. C., B.A. (Phys. Cult.)
Breedon, Ethyle M., (Agriculture)
Breslove, David, M.A., (Phys. Cult.)
Brown, Catharine (Sr. M. Eugenia) (Agric.)
Brown, Mona, ((Art & Phys. Cult.)
Bruder, Ella (Sr. M. Teresa) (Art)
Buckler, Josephine, (Sr. M. Petranda) (Agriculture)
Busch, Eleanor M. (Sr. M. Agnesia) (Agriculture)
Butcher, Cecil W.. B.A. (Phys. Cult.)
Cameron, James M., B.A. (Phys. Cult.)
Campbell, Fred A., (Manual Training)
Campbell, Robert J., (Manual Training)
Carswell, Elizabeth (Agriculture)
Castleman, Hilda V. B.A. (Phys. Cult.)
Caverhill, Elsie, B.A. (Phys. Cult.)
Chapman, (Mrs.) Retta M.H., (Phys. Cult)
Cleland, Margaret O., (Agriculture)
Colhoun, Mary (Art)
Cook, Ida M., (Phys. Cult.)
Cosgrove, James E. (Phys. Cult.)
Cowie, George T., (Manual Training)
Curran, Mary A., (Agriculture)
Currie, (Mrs.) Ethel. (Art)
Davidson, Annie K., B.A. (Phys. Cult.)
Davidson, Bessie (Agriculture)
Dickson, Christina F.. (Agriculture)
Duetta, Blanche G., (Agriculture)
Dunkley, Mary (Agriculture)
Edwards, Henry W., (Phys. Cult.)
Erb, William O., B.A. (Phys. Cult.)
Fennell, Rena L., (Phys. Cult.)
Forrest, Alice J., (Agric.)
Fick, Elizabeth Sr. M, Ageloff) Agric.)
Galbraith, Janet E. (Phys. Cult.)
Gamble, Charles L., (Agriculture)
Garllan, Elizabeth, B.A. (Phys. Cult.)
Garvin, Mary K., (Phys. Cult.)
Gendron, Muriel M., B.A. (Phys. Cult.)
Giles, Annie H., (Art)
Gillespie, Janet (Agriculture)
Golden, Maude (Agric.)
Gould, Ford M., B.A. (Vocal Music)
Gowdy, Douglas M., (Phys. Cult.)
Graham, Annie, B.A. (Phys. Cult.)
Grant, Christie H., (Agric.)
Grant, Cora, (Phys. Cult.)
Grieve, Bessie M.,(Phys. Cult.)
Haines, Ruth W., (Phys. Cult.)
Harris, Emarilla B., (Art)
Hartleib, Carrie, (Sr. M. Johana) (Phys. Cult.
Harvey, (Mrs.) Eliza M., (Agriculture)
Hay, Hazel F., B.A. (Phys. Cult.)
Helmkay, Dora L., B.A. (Phys. Cult.)
Heuermann, Anna,(Sr. M. Solania) (Agric.)
Hicks, Evalyn G., (Art)
Holley, Anna M., (Art)
Hood, Annie I., B.A. (Phys. Cult.)
Howard, George S., (Agriculture)
Howie, James R., (Phys. Cult.)
Howson, Bruce F., B.A. (Phys. Cult.)
Ionson, Margaret. B.A. (Phys. Cult.)
Irwin, Florence H., B.A. (Phys. Cult.)
Kendall, Sybel M., (Phys. Cul..)
Kennedy, George E., B.A.. (Phys. Cult.)
Knowles, Anna V., (Phys. Cult.)
Lawrence, Charles F., B.A. (Phys. Cult.)
Liezert, Dora (Agriculture)
Lucas, Florence G., (Agriculture)
Lynch, Elizabeth (Agriculture)
MacDonald, Jessie H., B.A. (Phys. Cult.)
MacIntyre, Sada (Commercial)
MacKenzie, Edna I., (Agriculture)
MacKenzie, Fanny C., (House. Science)
MacLeod, Emma B., B.A. (Phys. Cult.)
MacNish, Mary (Agriculture)
McCallum, Elsie A., (Agriculture)
McCarthy, Anna M.. (Sr. T. Aquinas), (Agriculture)
McCoig, Mary A., (Art)
McDonald, Margaret D., (Phys. Cult.)
McDonald, Stella M., (Sr M. Madeleine) (Agriculture)
McDougall, Jean L., B.A. (Phys. Cult.)
McFeely, Christina (Agriculture)
McGregor, Jessie (Sr. M. St. Austin) (Agriculture)
McGuire, Mary E., (Sr. M. Blanche) (Agriculture)
McIntosh, Jean (Phys. Cul..)
McIntyre, Jennie E., (Agriculture)
McNair, Alice A., B.A. (Art)
Magee, James A. (Phys. Cult.)
Makins, Edith P.. (Agriculture)
Masterson, Anna G., (Agriculture)
Mawson, George (Agriculture)
Maxwell, Mabel I., B.A. (Art & Phys. Cult.)
Meiklejohn, Sylvia M., (House. Science)

IV. Permanent Elementary Certificates (Continued)

Miller, Florence I., (Agriculture)
Millikin, Louise I., (Phys. Cult.)
Mitchell, Janet A., B.A. (Phys. Cult.)
Montgomery, Floral I. R., (Agriculture)
Moore, (Mrs.) Beatrice M., (Agriculture)
Moore, (Mrs.) Isabel, (Agriculture)
Moran, Grace M., (Art)
Morley, Edna L., (Agriculture)
Morris, Winifred (Phys. Cult.)
Morrow, Consuelo B., B. A. (Phys. Cult.)
Murphy, Catherine M., (Sr. M. Sebastian) (Agric.)
Murtha, Ella T., (Phys. Cult.)
Nelson, Eva E., B.A. (Phys. Cult.)
Newman, Olive T., (Agriculture)
Oakes, Elwood (Agriculture)
O'Leary, Mary (Sr. M. Philomena) (Art)
Park, Leonora (Phys. Cult.)
Payne, Minnie J., (Agriculture)
Pearse, Jean, (Auxiliary Classes)
Pearson, Elva M., (Agriculture)
Pearson, Florence E., B.A. (Phys. Cult.)
Pescod, Ethel M., (Agriculture)
Player, Winifred A., (Agriculture)
Quin, Mary M., (Household Science)
Rieger, Susan (Sr. M. Verena)
Robertson, Mary E., (Agriculture)
Rogers, William C., M.A. (Phys. Cult.)
Ross, Edith I., B.A. (Phys. Cult.)
Roszel John M., (Phys. Cult.)
Runstedler, Elizabeth (Phys. Cult.) (Sr. M. Chrysologa)
Sanderson, Elizabeth M., (Art & Phys. Cult.)
Sangster, Grace B., (Art)
Schafer, Frances E., (Agriculture)
Schneider, Theckla (Sr. M. Cajetan) (Art)
Seaman, John R., (Manual Training)
Sheridan, Eveline M., B.A. (Phys. Cult.)
Smith, Genevieve, (Agriculture)
Smithendorf, Herbert F., (Phys. Cult.)
Spencer, W. George, B.A. (Phys. Cult.)
Sproat, Emma L., (Agriculture)
Stapleton, Ella I., (Agriculture)
Stickwood, Alice M., (Agriculture)
Street, Marguerite (Sr. M. Therese) (Agriculture)
Swallow, Margaret B., (Phys. Cult.)
Tanner, Bhima L., (Agriculture)
Taylor, Pearl M., (Art)
Templar, Norah G., (Art)
Thomson, Thomas M., (Phys. Cult.)
Waddell, Thomas K., B.A. (Phys. Cult.)
Wallace, Minnie G., B.A. (Phys. Cult.)
Weegar, Ena D., (Agriculture)
Williams, Grace E., B.A. (Phys. Cult.)
Wilson, Muriel K., (Art)
Woodcock, Mary S., (Phys. Cult.)
Woods, Annie E., (Agriculture)
Wright, Edith G., (Agriculture)
Zavitz, Merrill S., (Agriculture)

V. Permanent Supervisors' and Intermediate Certificates

Barlow, Frederick J., B.A. (Agric.)
Davies, Norman B.A. (Agriculture)
Hill, Harry (Vocal Music)
Nicol, John L., (Vocal Music)
Shorey, Percival M., B.A., B.Sc., (Agric. & Farm Mechanics)
Short, John H., (Agriculture)
Sibley, Maude (Sr. M. F. Joseph) (Art)
White, Nora K., (Art)

VI. Permanent First Class Certificates

Allison, Catherine.
Ames, Vern N.
Amos, Jessie Elizabeth
Annett, Tillie M.
Armstrong, Harry Everett.
Awde, Frances Ina.
Baird, Kathryne.
Ball, Isabella Leslie.
Barfoot, Mary E.
Barlow, Hilda M.
Barnby, Eunice J.
Beacom, Elmer C.
Beatty, Albert Johnson.
Belfry, Elsie Florence.
Bennington, Evelyn Maude.
Benson, Gena M.
Benson, Harold J.
Betts, Marion Isobel.
Bishop, May.
Bolton, Robert Judson.
Booker, Frances Mary.
Bowair, Evelyn D.
Bowie, Bessie M.
Brewer, Mildred E.
Briggs, Joseph B.
Brodie, Mary Richmond.
Brokenshire, Melville C., B. A.
Brooks, Edward Frank.
Brown, Bessie.
Brown, Grace Josephine.
Brown, James Scott, B. A.
Bruder, Ella M., (Sr. M. Teresa.)
Carriere, Samuel W.
Cassels, Alice Sutherland.
Chamberlin, Edith Merle.
Chambers, Charles F.
Church, Clara A.
Cole, Mary Evelyn R.
Colhoun, Annie I.
Colling, Leslie Joseph.
Collins, Marie Johanna.
Connell, Constance L.
Cooper, Zilpah May.
Corlett, Etta Mabel.
Coulson, Robert W.
Coulter, Gladys Irene.
Coventry, Jean M.
Craig, Vera.
Craven, Henry.
Cringle, William Jack.
Currie, Burt.
Davidson, Agnes Marion.
Darling, Elizabeth I.
DeLaplante, Frances M.
Dodds, Irene I.
Donohue, Helen Jane.
Duffett, Margaret E. W.
Dunlop, Edna Eileen.
Eagleson, Robert L.
Elliot, Marion Belle.
Fair, Clara Elizabeth.
Fallis, Clare Raymond.
Fenton, Hazel Sara.
Fordyce, Stuart.
Fowler, Charles Alfred.
Francis, Garnet Clinton.
Freeman, Blanche Winnifred.
Fuller, Mary Helen R.
Garvin, Mary Kathleen.
Gibson, Errol Manley.
Girven, Margaret May, B. A.

VI. Permanent First Class Certificates (Continued)

Glen, Edna E.
Goldblatt, Ray.
Gowdy, Douglas M.
Gray, Reta Georgina.
Green, Myrtle E.
Gregg, Hazel V.
Greenan, Helen Mary, (Sr. M. Helen.)
Hanes, Marion Elizabeth
Harvey, Florence B.
Hayes, Edith Thelma.
Henderson, Beatrice Fern.
Hibbard, Olive Lovila.
Hicks, Olive M.
Hopgood, Grace.
Howard, William Richard, B. A.
Howell, Fannie I.
Hughes, Thomas John, B. A.
Humphries, Gladys Estelle.
Jackson, May B.
James, Edna.
Jerrom, Winnifred M.
Kearney, Winnifred A.
Kerr, Jessie I.
Kingston, Errol Frederick.
Kirk, Nina May.
Lally, Edward B.
Landry, Rena M.
Langdon, Ralph.
LaPiere, Marie E.
Leavitt, Irene.
MacDermid, Edith E.
MacFarlane, Eleanor Margaret.
MacKay, Laura A.
MacKenzie, Mattie H.
MacLachlan, Helen.
MacLennan, Bessie.
Mahoney, Helen Leadot.
Manders, Charles.
Mansz, Thusnelda M.
Mark, Jetta Marie.
Martin, Allan Alexander.
McCarty, Myrtle Irene.
McCullough, Mary, (Sr. M. Nativity.)
McGee, Marjorie E.
McGrath, Elizabeth B.
McIntyre, Archibald Fleming.
McKechnie, Mary E.
McKinnon, Archie Lynn.
McLaren, Minnie Edith.
McMackon, Laura F.
McMullen, Mabel, B. A.
McNabb, Elinor M.
McTaggart, Archibald N.
Meek, Harriet Agnes.
Meldrum, Florence C.
Melick, Anna.
Michener, Jessie M.
Middleton, Jean.
Middleton, Maude.
Mills, Electa M.
Moloney, Teresa.
Montgomery, John E.
Moorhouse, Edna L.
Moote, Dorothy Myrtle.
Morris, Clive M.
Muirhead, Sarah B.
Mummery, Rita E.
Munro, Peter Fraser.
Nephew, Ruth Marion.
Nolan, Anastasia, (Sr. M. Alexis).
Nolan, Mary Eva.
Nott, Mary Alice.
O'Connor, Camilla M.
Oliver, William Lyle.
Orchard, Norma A. F.
Ostrander, William A.
Parsons, Edith Priscilla.
Paterson, Reginald Ellis.
Peck, Myrtle Winnifred.
Penfold, Bessie G.
Pettypiece, Francis G. L.
Philpot, Electa Viola.
Pollock, Elizabeth Jean
Pretty, Elsie I.
Quinlan, Lucie Helen.
Radford, Alicia A.
Ramsden, Francis Cleve.
Reid, Emmett C.
Reinke, Edna Edith.
Richardson, Jennie.
Ridley, Marion Isabel.
Roe, Laura Jean.
Ross, Pearl.
Roszel, Jessie Mabel.
Rose, Alta Irene.
Scott, Mary M. Jean.
Sauve, Dora M.
Scott, Orpha Muriel.
Semple, Gertrude M.
Setterington, Ona Odell.
Shantz, Marie.
Skuce, Emma Vera L.
Smith, Florence Mydra.
Smith, Helen K.
Smyth, Eleanor Kathleen.
Snell, Blanche E.
Sprague, Lottie S.
Stalker, Cecil M.
Steele, Jeanne Muriel.
Steele, Lillian Olive.
Stevens, Vernon S., B. A.
Stewart, Janet Ina.
Stitt, Ruby Irene.
Strader, Vera A.
Stuart, Janetta H.
Summerby, Margaret Golding.
Sutherland, Jessie Margaret.
Taylor, Neil A.
Tennison, Bertha Ella.
Thompson, Annie M.
Todd, Hazel Adams.
Tryon, Margaret J.
Turnbull, Ella Wanless.
Turner, Ethel Josephine.
Turner, Helen M.
Usher, Zella G.
Walker, Mary H.
Watson, Mary Elizabeth.
Watts, Aleta L.
Weatherill, Mae.
Webster, Cecile Sidney.
Wells, Mary Jessie E.
Welsh, Royal Stanley.
Wesley, Caroline.
Westbrook, Daisy.
Western, Blanche Almeda.
White, Mary Emily.
Wiles, Helen E.
Wood, Helen Louise.

VII. Permanent Second Class Certificates

Abar, Edith M.
Abey, Harriet Catherine.
Acheson, Hazel Irene.
Acheson, Myrtle Margaret.
Acton, Verna E.
Adams, Beatrice F.
Adams, Grace Lavina.
Agar, Eva Willard.
Agnew, Della Elizabeth.
Aitken, Margaret.
Aldrich, Bertha Mae.
Allan, Louise B.
Allcock, Edna.
Allen, Freda Pearl.
Allen, Irene Jane.
Allen, Margaret E.
Ambler, Mary Elsie.
Anderson, Alice B.
Anderson, Bessie.
Anderson, Eva Grace.
Anderson, Helen L.
Anderson, Jean Helen.
Anderson, Marguerite Mary.
Anderson, Mary L.
Anderson, Norma McKellar.
Anderson, Pearl Margaret.
Andrews, Carrie E.
Anglin, Mildred Priscilla
Archer, Edith Helen.
Ardill, Marion Sibyl.
Argall, Mary Gertrude.
Arksey, Sylbia Hilda.
Armstrong, Christina Ruth.
Armstrong, Hazel V.
Armstrong, Lavina, (Sr. M. St. Gregory.)
Armstrong, Mary Agnes.
Arnold, Clara.
Arnold, Ella A.
Arnold, Rachel Aretta.
Ashton, Mary Edith.
Atchison, Lucy Irene (Mrs.)
Atkinson, Annie Verine.
Auger, Elizabeth Florence.
Ault, Orville E.

VII. Permanent Second Class Certificates (Continued)

Avery, Olive Marie.
Babb, Hattie Evelyn.
Baechler, Mary C.
Baigent, Sarah Lydia.
Bailey, Florence L.
Bailey, Florence Velma.
Baird, Mary Catherine.
Bairns, Eva H.
Baker, Annie Laurie.
Baker, Helen May.
Baker, Winnifred M.
Baldwin, Helen Alberta.
Ball, Laurine.
Ballantyne, Jennie.
Bannister, Mary.
Banting, Marguerite E. M.
Barrett, Hazel I.
Barricks, Basil Eugene.
Bartlett, Vera Jemima.
Bass, Norma Isabel.
Bathurst, Sara A.
Battin, John D.
Bawden, Maude E.
Baxter, Isabel Christina.
Baycroft, Mabel Annie.
Bayles, Gladys M.
Beattie, M. Damaris.
Bedford, Mary Dorothy.
Bell, Anna M.
Bell, Hilda E.
Bell, Jessie E.
Bell, Marion Margaret.
Bell, Myrtle Viola.
Benham, L. May, (Mrs.)
Berry, Vera Marie.
Best, Gertrude Mary.
Bilyea, Olive S.
Binning, Shirley J.
Black, Agnes B.
Black, Leverne Olive.
Blair, Alice M.
Blair, Grace Jean.
Blair, Margaret Edith.
Bock, Alice C.
Bogie, Jean Shannon.
Boinofski, Luhu (Sr. M. Macarius.)
Bolin, Margaret Mary.
Booth, Gladys R.
Booth, Louise E.
Boudreau, Maurice Eugene R
Bourne, Mary Irene.
Boyd, Gordon A.
Boyes, Violet Jane.
Boyle, Annie Alma G.
Boyle, Christena S.
Bradley, Florence V.
Bradley, Violet Elizabeth.
Brady, (Mrs.) Wilhellmina Annie.
Bragg, Ruby Myrta Pearl.
Brandt, May.
Brien, Gertrude Marie.
Brioux, Mary A., (Sr. M. Armene.)
Brown, Albert Fleming.
Brown, Beatrice I.
Brown, Ila I.
Brown, Jessie.
Brown, Katharine A.
Brown Margaret C.
Brown, Mary R.
Bruce, Kathleen.
Brumwell, Edith E.
Brunt, Thelma M.
Bryan, Marjorie Helena.
Bryce, Christina.
Buchan, Marjorie Hanna.
Buchley, Millie C. (Amelia.)
Buckham, Violet Rosena.
Bumstead, Edna Maude.
Bumstead, Mildred E.
Burgess, Lillian Doris.
Burns, Helen Aleda.
Burns, Helena Isobel.
Burns, Irene Margaret.
Burns, Mary W.
Burrill, Edith I.
Burse, Georgia Mabel A.
Burtch, Vera M.
Busby, Ella Muriel.
Butchart, Edna S.
Buttrum, Frances Isabella.
Byam, Ruby Alma.
Byrne, Ellen Matilda, (Sr. Mary Bernice.)
Cain, Helena A.
Calbeck, Olive Carmen.
Calder, Marion M.
Calder, Rhena E.
Calder, William Alexander.
Caldwell, Amy E.
Cameron, Christena M.
Cameron, Margaret.
Cameron, Stanley George.
Campbell, Agnes Frances McQueen.
Campbell, Audrey A.
Campbell, Ian Gilchrist.
Campbell, Isabel F.
Campbell, Muriel Jean.
Campbell, Rhena G.
Campbell, Rose Myrtle.
Campbell, Winnifred A.
Canning, Richard Reginald.
Cannon, Ermel Frances.
Caraher, A. Beatrice, (Sr. M. Inez.)
Carbert, Veronica B.
Card, Nellie Maude.
Carl, Martha L.
Carl, Ruby Irene.
Carpenter, Mary S.
Carr, James Bremner.
Carrol, Lydia M.
Carron, Emma L.
Carrothers, Kathleen.
Carruthers, Ina B.
Carswell, Velyian P.
Carter,Jennie Grierson.
Carter, Lyla Mercedes.
Cassie, Roy C.
Caswell, Edna Kathleen.
Caswell, Ruby Irene.
Causley, Gladys Lilian.
Chalmers, Jessie W.
Chalmers, Mabel J.
Chamney, Annie Clarke.
Chapman, Beulah L.
Chapman, Esther Marion.
Charlton, Gladys S.
Charteris, Carolyn.
Charteris, Elizabeth.
Chatland, Olive.
Childs, Ella B.
Chinnick, Hazel May.
Chwoen, Elizabeth D.
Church, Clara Louise.
Churchill, Amy M.
Clancy, Marguerite.
Clapham, Shirley Mercedes.
Clayton, Norma Mae.
Cleary, Mary Irene.
Clifford, Elizabeth.
Clouse, Myrtle Leone.
Coatsworth, Augusta.
Cochrane, Emma Catherine.
Cockburn, Beatrice Margaret.
Coffey, Blanche Thelma.
Coffey, Mary A.
Coghlan, Mary Lilas.
Collins, Catharine Irene.
Collins, Edith A.
Collins, Elsie Margaret.
Condon, Lillian Joanna.
Conlin, Mary E.
Connell, Leta A.
Connor, Edna M.
Conway, Elizabeth K.
Cook, Beatrice Victoria.
Cook, Mildred Elizabeth.
Coon, Edna Georgina.
Cooper, Gladys Mary.
Cooper, Ruth Lillian.
Cornell, Gladys M. (Mrs.)
Costley, Gladys.
Coultes, Lena M.
Coulthart, Laura M.
Coulton, Mary E.
Couper, Isabel.
Cousins, Archie R.
Coutts, Agnes Strathdee.
Cozens, Elsie D.
Craig, Elsa I.
Craig, Marjorie Little.
Craig, Sara Bernice.
Cramp, Ida M.
Crate, Florence.
Craven, Beatrice Marie.
Creech, Mary Ellen.
Crich, Mary Gertrude.
Cronyn, Eileen M., (Sr. M. Eileen.)

VII. Permanent Second Class Certificates (Continued)

Crooks, Elsie Beatrice.
Crookshanks, Grace Lilian.
Crosby, Marion E. Blanche.
Crowe, Edna Annie.
Crozier, Ida Mae.
Cruickshank, Ishbel J.
Cull, Claro, (Sr. M. Afra.)
Cumming, Elizabeth M.
Cunningham, Hazel.
Curry, Alice Louise.
Curtis, Lulu May.
Cutt, Ione.
Davey, Mary.
Davidovitz, Matilda.
Davidson, Belle.
Davidson, Grace Jean.
Davidson, Mamie Evelyn.
Davidson, Nellie Irene.
Dawson, Maude.
Deacon, Florence Fiona.
Dean, Ethel Velma.
Denning, Annie Maud.
Dennis, Flora Cathrine.
Derby, Stella F.
Devereaux, Louise Mary.
Dewar, James Alexander.
Dickey, Florence A.
Dickey, Marion Elizabeth.
Dickie, Matilda.
Dillon, Beatrice M.
Dinsmore, Margaret Beatrice
Dixon, Edna J.
Dockrill, Leila May.
Dodds, Helen Margaret.
Doherty, Nellie M.
Doig, Ellen S.
Dolan, Evelyn M.
Donaghy, Thelma M.
Donaldson, Mildred Elizabeth
Donovan, Bernice.
Dool, Lillian Ida Bertha.
Dore, Alice Eileen.
Doucette, Sadie.
Douglas, Catherine A.
Douglas, Margaret Helen Gladys.
Dougherty, Hilda Irene.
Downey, Bernadette, (Sr. M. Gabriella.)
Downie, Mary Gladys.
Dowsett, Hazel M.
Draper, Winnie Hazel.
Drehmer, Vera May.
Drohan, Hannah E.
Dufton, Hilda G.
Dunbar, Kathleen Mary.
Dunbar, Ruby Katherine.
Duncan, Agnes.
Duncan, Lelia T.
Dundass, Anne Gray.
Dunn, Nellie Beatrice.
Durrell, Mary L.
Durie, Etta F.
Dyer, Beatrice M.
Earl, May Eliza.
Eastwood, Mary Aileen.
Eaton, Eva Rebecca.
Eby, Inez M.
Edwards, Ferne V.
Elford, Mabel Marie.
Elliot, Bessie Nichol.
Elliott, Edna R.
Elliott, Ella Kathleen.
Elliott, Elsie.
Elliott, Lula E. E.
Elliott, Ruby A.
Ellis, Jennie Brewster.
Ellis, Vera P.
Ellsworth, Evelyn Gertrude
Elward, Helen Margaret.
English, Nettie Pearl.
Evans, Jean.
Evans, Verlie May.
Facey, Margaret Jane.
Fagan, Sarah Z.
Fahey, Marie C.
Fahrner, Martha Lillian.
Falkner, Rhoda P.
Fargey, Marion I.
Fargey, Marjorie Ellen.
Farr, Jessie Evelyn.
Fawcett, Verne Clifford.
Feargue, Hazel.
Fearman, Bessie.
Featherston, Gladys Luella M
Feir, Ruby May.
Ferguson, Dorothy Isabel.
Ferguson, Keitha.
Ferris, Marjorie.
Ficht, Gladys C.
Finch, Burt A.
Finch, Olive Jean.
Findlay, Mabel Eliza.
Flitchett, Gretta.
Fligg, Marion Roberts.
Floyd, Gertrude Mills.
Floyd, Jessie A.
Forestell, Matilda M.
Forrest, Margaret Elizabeth.
Forsyth, Viola.
Foster, Irene M.
Foster, Martha Hughena.
Foster, Nellie Esther E. (Mrs.)
Fox, Marjorie Thelma.
Francis, Edith Ellen.
Franklin, Beatrice Frances.
Fraser, Barbara.
French, Irene Eleanor.
French, Lotus Henderson, (Mrs.)
Fritz, Erna Beatrice.
Furlong, Ella C.
Furlong, Irene E.
Fursman, Nellie L.
Gadke, Violet.
Gagnon, Gladys E.
Galbraith, Charlotte.
Gallagher, Edna.
Gallagher, Margaret Elizabeth
Gallagher, Mary M.
Galley, Teresa, (Sr. M. Avila.)
Gamble, H. Joy.
Gardiner, Bessie.
Gardiner, Euphemia A.
Garland, Julie Anna.
Garrett, Charlotte Isabella.
Gaslin, Ruth M.
Gastle, Margaret Winnifred
Gawley, Annie Blanche,
Geddes, Norman M.
Gemmill, Muriel Elizabeth.
Gibson, Gertrude Marguerite
Gibson, Margaret Cook.
Gibson, Ruth O.
Gilbert, Ethel.
Gill, Jennie M.
Gillies, Rachel Arvella.
Gillies, Sarah Lillie.
Gilmour, Ruth Aurelia.
Givens, Marguerite Jean.
Glaves, Cecil R.
Gleeson, Mary H.
Glenney, Marguerite.
Godkin, Hester M.
Goodwill, Violet.
Gordon, Jessie.
Gordon, Olive Marion, (Mrs.)
Gott, Leila Berdina.
Gourley, Lilian J.
Graef, Anna Keith.
Graham, Cora M.
Graham, Velma F.
Grainger, Ella Jewel.
Grant, Nellie Ward.
Greenwood, John Wilfred.
Greer, Mary Laverne.
Grosskurth, Maude W.
Guest, Dora Evelyn.
Guest, Laura Myrtle.
Haffey, Vera Mary.
Hall, Anna Elaine.
Hall, Annie Martin.
Hall, Wilma Jane.
Hallett, Mabel Audrey.
Halliday, Elizabeth B.
Halloran, Catharine Mary.
Halls, Merna H.
Halpenny, Estella S.
Hambly, Ruth Mildred.
Hamill, Olive Ethel.
Hamilton, Gladys V.
Hamilton, Lottie.
Hamilton, Mildred Isobel.
Hammett, Elizabeth Lillian.
Hammett, Mary L.
Hammond, Alma Margaret.
Hanbidge, Estella.
Hanmer, Olive May.
Hansley, Harriet.
Hardwicke, Mary Elizabeth.
Harrington, Helen.
Harrington, Mary Agatha.
Harrison, Ella Marie.
Harrison, Gladys A.
Harrison, Marjorie M.
Hart, Grizzell R.
Hart, Loretta, (Sr. M. St. Jerome.)

VII. Permanent Second Class Certificates (Continued)

Hartwell, Hazel Irene.
Harvey, Constance Isabel.
Harvey, Florence Beatrice.
Hattle, Florence C.
Hay, Georgina M.
Hayhurst, Jean Heywood.
Heffernan, Marie K.
Helm, Julia Elizabeth.
Hemphill, Christina.
Henderson, Zetta Mila Anne.
Henry, Maude Adeline.
Herold, Hilda E.
Heston, Mildred F.
Hetherington, Mary.
Hetherington, Mary E.
Hewitt, Georgia Clare.
Hewitt, Thomas C.
Hicks, Katherine Maude.
Hill, Marguerite Grace.
Hill, Marie Lilian.
Hilliker, Ruby May.
Hodgkinson, Lily Rose.
Hoeflin, Cordelia E.
Hoffman, Clayton Alvin.
Holdaway, Lola Mary.
Holmes, Bernice.
Holmes, Beulah.
Holmes, Lois Madeline.
Honsberger, Lillian.
Hood, Mildred E.
Hopper, Elizabeth E.
Horan, Mary Blaise.
Horne, Dorothy E.
Horne, Olivia.
Hossack, Margaret A.
Hotson, Elizabeth R.
Houde, Clara Mary.
Howatt, Lila M.
Howden, Gladys Sarah Jane
Howie, Margaret Gray.
Hoyland, Agnes Annie.
Huff, Lavine M.
Humble, Annie I.
Humphries, Jean.
Hurley, Mildred J., (Sr. M Mildred.)
Husted, Macey Louise.
Hutchinson, Rachel Georgina
Imrie, Olive H.
Irving, Jean Cumberford.
Irwin, Marjorie Shearer.
Jackson, Claire B.
Jackson, Della I.
Jackson, Mary McCullough.
Jackson, Olive D.
Jackson, Ophelia E.
Jardine, Tressa E.
Jeffs, Nellie Gertrude.
Jelly, Addie.
Jelly, Miriam Evelyn.
Jenkins, Edith Pearl.
Johns, Amy E.
Johns, Margaret.
Johnson, Edith Irene.
Johnson, Iva Vivian. (Mrs.)
Johnson, Mary Ethel.
Johnson, Viola Regina.
Johnston, Elsie C.
Johnston, Florence E.
Johnston, Robert Alexander
Johnston, Winnifred Beatrice
Johnstone, Irene.
Jones, Elsie Catherine Florence.
Jones, Florence.
Jones, Mamie Margaret.
Jordan, Mabel Irene Isabella.
Judd, Esther Lindsay, (Mrs.)
Kalbfleisch, Katharine C.
Kannawin, Clara.
Kayler, Mildred Bernice.
Keachie, Margaret Erma E.
Keane, James A.
Kearney, Marie Antoinette.
Kearns, Mabel.
Keays, Laura E.
Kee, Mary Florence.
Keetch, Norma V.
Kell, Ethel M., (Mrs.)
Kelly, M. Gladys J.
Kelly, Mabel Fiemont.
Kelso, Reita L.
Kendrick, Alva A.
Kennedy, Eleanor A.
Kennedy, Katherine Geraldine.
Kennedy, Mary E.
Kennedy, Mary Elizabeth.
Kennedy, Myrtle S.
Kenny, Lewella.
Keogh, Frances, (Sr. M. Francis Regis.)
Kerr, Katie L.
Kerr, Lilla Muriel.
Kerr, Margaret L.
Kersey, Theresa Elizabeth.
Key, Mildred May.
Kidd, Mayme E.
Kiefer, Mabel L.
Kiemele, Lillian May.
Kinchsular, Redmond.
King, Edith G.
Kirk, Irene.
Knill, Gertrude J.
Knister, Marjorie.
Knox, Mary Vera.
Knuff, Margaret Ethel.
Konkle, Muriel Grace.
Kuntz, Dorothy E.
LaBelle, Clementine, (Sr. M Zoe.)
LaFontaine, Edna Mary.
Laffoley, Yvonne.
Laidlaw, Constance Isabel.
Laing, Della Blanche.
Lake, Elma.
Lambier, Olive Hazel.
Langley, Olive Marion.
Langley, Rose Evelyn.
Langman, Mary Evelyn.
Latimer, John Wesley.
Laundy, Mae M.
Lawson, Myrtle Evelyn.
Lawton, Marjorie Evangeline.
Leahy, Grace M., (Sr. Mary Mercedes.)
LeCappelain, Ida S.
Lee, Vida Muriel.
Leeder, Cecelia E.
Leitch, Bertha Victoria.
Leitch, Elizabeth.
Lemay, Gertrude A., (Mrs.)
Lemon, Margaret K.
Lickley, Helen Agnes.
Liddle, Muriel Irene, (Mrs.)
Lidkea, Meron Alice.
Lind, Mabel A.
Linton, Grace Maud.
Lockhart, Anna Marie.
Lockhart, Mildred Louisa.
Lockridge, Frances L.
Lomas, Florence Joscelyn.
Long, Annie Muriel Elizabeth
Long, Edythe R.
Loth, Erma.
Lowden, Henry H.
Lowry, Lillian Nadine.
Lowry, Nora May.
Luhrmann, Dorothy Grace.
Lumsden, Orpha Ray.
Luxon, Marjorie J.
Lynch, Agnes Loretta.
Macbeth, Jessie Bell.
MacCuaig, Islay Barbara.
MacDonald, Bella.
MacDonald, Dora Helena.
MacDonald, Florence.
MacDonald, Marie.
MacDonald, Mary A.
MacDonell, Elmira Janet.
MacDonell, Mary Kate.
MacFarlane, Mary.
MacGregor, Amy Marie.
MacInnis, Ethel.
MacIntyre, Edith Elizabeth.
Macintyre, Kathleen Isabelle
MacKay, Jean.
MacKay, Kate Alda.
Mackenzie, Elizabeth.
Mackenzie, Steele Caldwell.
MacLaurin, Florence May.
MacLennan, Marguerite.
MacLennan, Mary Katharine
MacLeod, Alexina.
MacMillan, Isabel Margaret.
MacPhail, Donald.
MacPherson, Vera Morrison.
MacQuarrie, Anna Harriette
Madill, Margaret B.
Mair, Myrtle M.
Maisey, Olive Jane.
Malcolm, Dorothy Margaret.
Maloney, Phyllis Margaret.
Malpass, Mary Luella.
Mann, Martha.
Marchant, William Thomas.
Mareon, Agnes.
Marshall, Martha Marion.

VII. Permanent Second Class Certificates (Continued)

Marshall, Reta Louise.
Martin, Cyril C.
Mast, Beatrice Rose.
Masters, Merrill Isabel Barrie.
McAlpine, Alexandrina V.
McAlpine, Jessie Isabel.
McArthur, Emily C.
McAuley, Mary Mabel, (Sr. M. St. Andrew.)
McBean, Isabel Elizabeth.
McBrayne, Margaret.
McBurney, Elva May.
McCall, Margaret E., (Mrs.)
McCallum, Florence Isabel.
McCallum, Gladys.
McCallum, Jean Augusta.
McCallum, Jennie.
McCann, Della, (Sr. Mary Ethelreda.)
McCann, Elizabeth E.
McCarthar, Leata D.
McCarthar, Maggiebelle.
McCaw, Jennie H.
McCaw, Sadie Ruth.
McClory, Alma F.
McClung, Violet G.
McClure, Agnes C.
McConachie, Annie B. T.
McConaghy, Margaret Irene.
McCord, Maude Muriel.
McCordic, Coreta M.
McCulloch, Anna Christena.
McCurry, Leocadia A.
McCutcheon, William Blake.
McDermid, Kathleen Elizabeth.
McDermott, Mary Cecilia.
McDonald, Ella Eileen.
McDonald, Katie C.
McDonald, Marguerite Isabel
McDonald, Marie E.
McDonald, Robert Wilfred.
McDougall, Agnes.
McDougall, Julia A., (Sr. M. Dolorosa.)
McDowell, J. J. Ernest.
McEachen, Lillian.
McEachern, Maggie.
McEachern, Mary Kathleen.
McElligott, Mary Marcella.
McEwen, Annie Florence.
McFadden, Rheta May.
McFarland, Gertrude Stella.
McFarland, Martha Louise.
McFarland, Zetta.
McGee, Pearl E.
McGowan, Marcella.
McGuire, Nora C.
McInnis, Olive Belle.
McIntyre, Amelia.
McIntyre, Sarah.
McKay, Lizzie M.
McKenzie, Jessie.
McKinlay, Mabel I.
McKinlay, Mary E.
McKinley, Mary Blanche.
McLaren, Jean Hamilton.
McLaughlin, Alberta.
McLennan, Rachel Jennie.
McLeod, William John.
McMackon, Grace A.
McMahon, Permelia V.
McMaster, Marjorie Margaret.
McMaster, Mary C.
McMath, Marjorie Gray.
McMullin, Grace Eleanor (Mrs.)
McMurchy, M. E., (Mrs.)
McMurtry, Myrtle Olive.
McNab, Katherine Irene.
McNamara, Marie A.
McPherson, Florence E.
McPherson, Hazelle G. B.
McPherson, Mamie.
McQueen, Annie Campbell.
McRuer, Grace E.
McTague, Minnie Viola.
McVittie, William Roy.
McWilliams, Mary Maud.
Meagher, Clare M.
Medler, Gladys I.
Meek, Nellie Elizabeth.
Meek Winnifred.
Megraw, Winnifred.
Meinke, Vera Eleanor.
Mercer, James Henry.
Mercer, Jessie Dunbar.
Meredith, Minnie Hilda.
Meredith, Ruby Loretta Grace
Merritt, Willis A. H.
Messerschmid, Edith M.
Metcalfe, Jennie McLean.
Michie, Annie Bell.
Milburn, Alice A.
Miller, Christine.
Miller, Mabel Edna.
Miller, Vera Anne.
Milliken, Melville Cecil.
Mills, Margaret Kathleen.
Minaker, Beatrice Florence.
Mingle, Mabel A.
Minielly, Annie Grace.
Mitchell, Alfreda Cowan.
Mitchell, Bessie Genevieve, (Mrs.)
Mitchell, Christena.
Mitchell, Helen B.
Mizen, Rhoda Jean.
Maloney, Henrietta A.
Monteith, Mary M.
Montgomery, Bessie W.
Mooney, Ruby J.
Moore, Myrtle Winnifred.
Morgan, Agnes Lillian.
Morgan, Melissa Irene.
Morns, Dorothea, (Mrs.)
Morrison, Margaret Jean.
Morrissey, Helen L.
Mortley, Lavina Agnes.
Morton, Gladys V.
Morton, Margaret E.
Moses, Myra W.
Moulson, Margaret L.
Muma, Mabel E.
Murdock, Iva M.
Murphy, Beatrice F., (Sr. Germaine.)
Murphy, Genevieve Margaret.
Nagle, Mary I., (Sr. M. Liguori.)
Neil, Edna.
Neill, Harriet Elizabeth.
Nesbitt, Nellie Elizabeth.
Newton, Laura.
Nicholson, Euphemia Jean.
Nickle, Ada Florence.
Nicoll, Christene G.
Noble, Sadie Elizabeth.
Nokes, Constance L.
Noonan, Vincent James.
Northcott, Olive N.
O'Boyle, Teresa Mary.
O'Brien, Cecil F.
O'Brien, Mary Veronica Cecilia.
O'Connor, Elizabeth J., (Sr. M. St. Thomas.)
O'Connor, M. Genevieve.
O'Dair, Catherine Irene.
O'Dell, Margery.
O'Dell, Sarah Gertrude.
O'Donnell, Marguerite Teresa
O'Grady, Rose Gertrude.
O'Leary, Clara M., (Sr. Mary Patrick Joseph.)
O'Meara, Kathleen Agatha.
O'Shaughnessy, Gertrude.
Oakes, Rita M.
Oke, Helen K.
Oldfield, Alice Lyle.
Oldham, Myrtle Lillian Fern.
Olmstead, Willis C.
Orton, Clara J. R.
Osborne, Dimple Georgina.
Osborne, Ruby Evelyn.
Osterhout, Florence Helena.
Osterhout, Mildred B.
Ostrander, Lula May.
Oswald, Alice Louise.
Oulton, Ethel Mildred.
Paisley, Evangeline M.
Paisley, Nellie B.
Palleck, Amelia.
Park, Hilda Anna.
Parrott, Hazel Alberta.
Parsons, Gerald Washington
Parsons, Ruby A.
Patten, Ada E.
Patterson, Hilda D.
Patterson, Marguerite E.
Patton, Blossom.
Pauling, Frances Mary.
Peacock, Emma Ruth.
Pearce, Annie G. VanDusen, (Mrs.)
Pearson, Mary Victoria.
Peck, Clara Beatrice.

VII. Permanent Second Class Certificates (Continued)

Perry, Catherine A.
Perry, Lottie Pearl.
Perry, Sirilla Alberta.
Piercey, Mary B.
Pierson, Pearl Rachel Mary
Plunkett, Hamilton.
Pouting, Mary Elizabeth.
Poole, Anna E.
Poole, Mary Marjory.
Power, Kathleen C.
Preston, Marjorie Evelyn.
Priest, Dorothy R.
Proud, Annie.
Provins, Meta Marguerite.
Prud'homme, Florence (Mrs.)
Purves, Winnifred I.
Purvis, Leila.
Pye, Maybell.
Quanbury, Gladys.
Quirt, Gertrude L.
Rafter, Alice M.
Ransom, Addie H.
Rathwell, Emma Elizabeth.
Ratz, Aileen May.
Rauzon, Florida, (Sr. St. Armand.)
Raycraft, Janet Kathleen.
Reaume, Salva M.
Redpath, Margaret Bernice.
Regan, Margaret M.
Reid, Clara Eunice.
Relyea, Lillian W.
Rendall, Hazel J.
Reynolds, Frances Elinor.
Ries, Esther Alvine.
Rigg, Myrtle.
Riggs, Gladys, Irene.
Risebrough, Hilda E.
Rittenhouse, Anna J.
Roache, Loretta.
Robb, Liala Gladys.
Roberts, Gertrude L.
Roberts, Reta M.
Robertson, Helena J.
Robertson, Jessie Agnes.
Robertson, Kathleen Isabella
Robinson, Alta. A.
Robinson, Eva.
Robinson, Genevieve.
Robinson, Josephine B.
Robinson, Mary Victoria.
Robson, Moreen.
Rockwell, Ione Victoria.
Rodgers, Muriel Joy.
Rogers, Florence Mabel A.
Rogers, Frances Corley.
Rogers, Hilda V.
Rogerson, May.
Roney, Louise.
Rosebush, Bessie H.
Ross, Edith E.
Ross, Enid F.
Ross, Violet B.
Rounds, Ruth Ethelwyn.
Routley, Clarence Basil.
Rowe, Ethel Rosanna.
Rowe, Reta Nellie.
Rowland, Margaret E.
Rowntree, Doris May.
Roys, Augusta Jean.
Rundle, Joanna.
Runnings, Myrtle Aileen.
Russell, Isabelle.
Rutherford, Agnes A.
Ryan, Irene M.
Sammon, Kathleen.
Sanders, Lela Blanche.
Sanderson, Mary Isobel.
Saunders, Hazel B.
Savage, Olive Hazel.
Scanlan, Cecilia Elizabeth.
Scarron, Greta N.
Schierholtz, Edna Louise.
Schnitzler, Lohise M., (Sr. M. Gertrude.)
Schruder, Leona M.
Scott, Annette Pearl.
Scott, Bertha Luella.
Scott, Shirley.
Screaton, Gwendolen.
Seaton, Marjorie.
Seehaver, Alice M.
Seguim, Marguerite, (Sr. M. Francis Xavier.)
Sehl, Harold Joseph.
Selby, Jennie Agnes.
Seltzer, Ernest C.
Sergeant, Helen Jeannette.
Shadd, Marion.
Shanahan, Carmel E.
Shaw, Blanche Leon.
Shaw, Caroline Annie.
Shaw, Elsie Augusta.
Shaw, Olivia Annie.
Shaw, Pauline E.
Shelton, Elsie Irene.
Shepley, Mabel I.
Sheppard, Hester Oread.
Shields, Hazel A.
Silcox, J. Bertram.
Sills, Georgina.
Simpson, Laura Marguerite.
Simpson, Olive Myrtle.
Sims, Caroline E.
Skakel, Myrtle R.
Skeoch, Sarah J.
Skitch, Sybil Wade.
Skuce, Emma Vera Lillian.
Slade, Elma Marjorie.
Sleeman, Mabel May.
Sloan, Lillian P.
Smaill, Laura Belle.
Smallacombe, Carline E.
Smith, Edith Helen.
Smith, Gladys E.
Smith, Helen Hilda.
Smith, Lena M.
Smith, Maggie.
Smith, Marjorie A.
Smith, Ruby.
Smith, Vanelda Grace.
Smith, Weltha Grace.
Smith, Wilma Grace.
Smyth, Caroline Louise.
Snedden, Jean Elizabeth.
Snider, Reginald Lorne.
Snow, Lillian, J. P.
Snyder, Isabella E.
Sonley, Annie Caroline.
Spackman, Blanche G.
Speck, Norma Evelyn.
Speers, Elsie Mae.
Spence, Ella M.
Spence, Gertrude Eveline.
Spence, Marguerite Elizabeth
Sproat, Evelyn.
Sprott, Sadie.
Sproul, Rita.
Standing, Janet Bell.
Stanley, Agnes M.
Staples, Laura Vera.
Steen, Agnes S.
Steen, Christine Anna.
Steffler, Loretto.
Steinberg, Esther Celina.
Stephenson, Dorothy M.
Stevenson, Asa Gordon.
Stevenson, Jean M.
Stevenson, Kathleen May.
Steward, Lillian Claire.
Stewart, Bella M.
Stewart, Edna Kathleen.
Stewart, Marguerite Jean.
Stickney, Lila Myrtle.
Stock, Freda M.
Stoltz, Effie Marguerite.
Stone, Nellie Judson, (Mrs.)
Stonehouse, Ethel A.
Stuart, Agnes.
Stumpf, Marjorie Louise.
Sullivan, Nora M.
Sully, Violet Minnie.
Sundeen, Hazel Irene.
Sutcliffe, Vera L.
Sweeney, Florence Patricia.
Sword, Margaret A. M.
Tate, Eva Belle.
Taylor, Charles William.
Taylor, Janet E.
Taylor, Lyda Irene.
Taylor, Olive Muriel.
Taylor, Vida Audentia.
Templeton, Margaret Pearl.
Thompson, Basil N.
Thompson, Elizabeth Rosabel.
Thompson, Jessie B.
Thompson, Marie.
Thompson, Myrtle.
Thorpe, Mary.
Thurston, Garnett M.
Timmins, Mary Eva.
Tompkins, Florence P.
Toole, Lila M.
Tough, Bessie Isabelle.
Truan, Hazel C.
Turney, Gladys L.
Twanley, Harold E.
Tyler, Valerie K.

VII. Permanent Second Class Certificates (Continued)

Vale, Clara Beach.
Vannatter, Mary Alice.
Vannest, Keitha Mary.
Vaughan, Selina M.
Veitch, Mary Ethel, (Mrs.)
Wadsworth, Pauline E.
Walker, Dorothy Frances.
Walker, Erma.
Walker, Flora Grace.
Walker, Mary Leota.
Walker, Myrtle L.
Wallace, Annie E.
Walsh, Eleanor L.
Walsh, Frances E.
Walter, Helen.
Walters, Myrtle E.
Wannan, Marjorie E.
Ward, Anita Hannah.
Ward, Janet Ruth.
Ward, Sadie R.
Ward, Walter Charles.
Warren, Lena J.
Watkinson, Lilian.
Watson, Jennie May.
Watson, Karolyn Marie.
Watson, Mary Christina.
Watson, Vera McCall.
Watt, Margaret C.
Webber, Anna Marie.
Weber, Hazel Gladstone.
Weir, Freda E. E.
Weishar, Gertrude T.
Weishar, Lidwina R., (Sr. Gertrude.)
Weldon, Franklin L.
Werte, Gordon B.
Whaley, Florence E.
White, Edna Alice.
White, Jessie E.
White, Miriam Evelyn.
Whiteman, Margaret Alma.
Whiting, Mary Isadore.
Whitley, Sadie Pearl.
Whitlock, Hilda Winnifred.
Whitney, Alice E.
Whyte, Gladys Isabel.
Widdifield, Kathleen.
Wilkin, Laura Cordick.
Williams, Clementine A.
Williams, Dorcas I.
Williams, Irene M.
Williamson, Ina.
Willison, Tena.
Williston, Lloyd L.
Wilson, Dell Elizabeth.
Wilson, M. Agnes.
Wilson, Mary Dorothy.
Wilson, Myrtle Alma.
Wilson, Nellie Irene.
Wilson, Pauline B.
Winter, Carrie Idella.
Winter, Mabel Selena.
Wonnacott, Harold C.
Wood, Erma Laurine.
Wood, Kathryn Arville.
Wood, Mary Merle.
Woodruff, John Errol.
Woods, Winnifred Sarah.
Wooldridge, Mansell M. B.
Woollatt, Helen V. M.
Workman, Mary Gladys.
Wright, Alice J.
Wright, Mildred Bernice.
Wright, Myrtle M.
Wright, Rose A. (Sr. M. Anita.)
Wyers, Mabel Gladys.
Yates, John Frederick.
Young, Helen.
Zivian, Frances.
Zumstien, Muriel Beatrice.

VIII. Permanent Kindergarten-Primary Certificates

Auld, Jean A.
Blakslee, Mary Bevan.
Boake, Margaret J.
Brown, Beatrice I.
Brown, Helen Grace.
Buttrey, Eva Gertrude.
Charteris, Carrie L.
Drake, Elma Irene.
Dehler, Lucy M., (Sr. M. Giovanna.)
Devitt, Vera M. W.
Doxsee, Carolyne L. I.
Elliot, Lillian Margarita.
Ferrier, Mabel Minerva.
Fraser, Libbie Wood.
Gaynor, Marjorie Pearl.
Greenlees, Elva.
Gregory, Mabel Elizabeth.
Hawkins, Mae, (Sr. M. Theophane.)
Lancaster, Eva W.
MacDonald, Viola Adele.
Marshall, Rae.
Martin, Helena E., (Sr. M. Caia.)
Martin, Kathleen E.
McKay, Ella I.
McKinley, Reta.
Neish, Laura T.
Russell, Birdie M. O.
Thomson, Jean.
Wilkinson, Frances.
Williamson, Ina.
Wilson, Isabel M.
Wright, Edythe S.

IX. Permanent Kindergarten-Directors' Certificates

Bole, Mary Etta May.
Derby, Imogene.
Durant, Arlie B.
Ferguson, Lucy H.
Grace, Lieuellen Agnes.
Haney, Reta
Jamieson, Annie.
Kilgore, Marion B.
Lang, Alma Victoria.
McFadden, Rheta M.
Palmer, Anne.
Pierson, Mary E.
Rieder, Mae C.
Stringer, Rowena V.
Toye, Norma Gertrude.
Ward, (Mrs.) Helen M.
Westland, Edith M.
Winkie, Elsie.

X. Manual Training Certificates

Permanent Ordinary

Capel, John.
Hartry, Ryerson R.
Morrow, William O.
Sirrs, Elmer J.
Weir, Norman L.

Permanent Specialist

Carson, William L.
Chrysler, James G.
Gillies David W.
Phelan, Frank J.

XI. Household Science Certificates

Permanent Ordinary

Affleck, Bessie S.
Carpenter, Anna H.
Colbeck, Lucy C.
Davis, Lillian H.
Earnshaw, Annie A.
Ferguson, Elsie.
Fife, Bessie I.
Milne, Margaret V. S.
Mowbray, Tena P.
Rattray, Mary G.
Silver, Mary A.
Ward, Rhoda M.
Westlake, Lily J.

Permanent Specialist

Henderson, Emma I.

XII.—Professional Certificates

	No. of Candidates	Extra Mural Students	High School Permanent Certificates	High School Interim Certificates	Permanent Provincial First Class Certificates	Interim First Class Certificates	Permanent Second Class Certificates	Interim Second Class Certificates	Limited Third Class Certificates valid for five years	District Certificates valid for one or two years	Extended District Certificates (Academic Course)	Total number of Certificates
College of Education...	94	16	.....	88	.....	31	....	....	.....	.....	.....	119
Normal Schools.....	1314	156	.....	....	.....	129	....	1158	71	.....	.....	1338
Autumn Model Schools.	77	9	.....	....	.....	....	....	....	84	2	.....	86
English-French Model Schools	....	....	.....	....	.....	....	....	....	65	.....	.....	65
Summer Model Schools.	424	4	.....	....	.....	....	....	....	* 80	: 06	119	405
Certificates issued on protanto standing....	....	....	.....	....	.....	....	....	5	.....	.....	.....	5
†Interim First Class Certificates issued on reaching 20 years of age.....	....	....	.....	....	.....	33	....	....	.....	.....	.....	33
Interim Certificates made permanent.....	....	....	222	....	210	....	1075	....	.....	.....	.....	1507
Total number of newly certificated teachers...	....	....	.....	88	.....	193	....	1163	220	208	.....	1872

*These previously held District Certificates.
†These previously held Interim II Class Certificates.

Household Science

Number of Interim Ordinary Certificates..... 18
Number of Interim Specialist Certificates..... 4
Number of Permanent Ordinary Certificates..... 13
Number of Permanent Specialist Certificates..... 1

Manual Training

Number of Interim Ordinary Certificates..... 10
Number of Interim Specialist Certificates..... 2
Number of Permanent Ordinary Certificates..... 5
Number of Permanent Specialist Certificates..... 4

Kindergarten Certificates

Number of Interim Kindergarten-Primary Certificates..... 40
Number of Permanent Kindergarten-Primary Certificates..... 32
Number of Kindergarten Directors' Certificates..... 18

Art and Physical Culture Certificates (College of Education)

Number of Interim Elementary Physical Culture Certificates..... 46
Number of Interim Elementary Art Certificates..... 24

Summer School Certificates

Elementary Agriculture and Horticulture (Interim)	176	Specialists in Commercial Subjects (Interim)	3
Intermediate Agriculture and Horticulture (Interim)	24	Farm Mechanics (Interim)	7
Intermediate Agriculture and Horticulture (Permanent)	4	Elementary Household Science	30
Specialist in Agriculture and Horticulture (Interim)	6	Kindergarten-Primary (Interim)	80
Elementary Art (Interim)	162	Elementary Vocal Music (Interim)	32
Supervisors in Art (Interim)	21	Supervisors in Vocal Music (Interim)	19
Specialists in Art (Interim)	23	Elementary Physical Culture (Interim)	174
Auxiliary Classes (Interim)	49	Supervisors of Physical Culture (Interim)	70
Elementary Commercial Subjects (Interim)	1	Specialists in Physical Culture (Interim)	77
		Sewing Certificates (Interim)	11

NOTE:—In addition to the above, twenty-eight Interim Certificates in Elementary Physical Culture and six Certificates in Agriculture and Horticulture were granted on pro tanto standing.

XIII. Temporary Certificates issued in 1921

Inspectorates	Number during 1st half year	Number during 2nd half year	Inspectorates	Number during 1st half year	Number during 2nd half year
Brant and Norfolk, N.	1	.....	Renfrew, S.	4	3
Bruce, E.	12	4	Simcoe, E.	3	1
Bruce, W.	1	.....	Simcoe, N.	1	2
Carleton, E.	.....	4	Simcoe, S.	1	2
Carleton, W. and			Stormont	1	1
Lanark, E.	10	9	Victoria, W.	3	.....
Dufferin	2	.....	Waterloo, No. 2	1	.....
Dundas	2	.....	Welland, S.	1	.....
Elgin, E.	.....	2	Wellington, N.	.....	1
Elgin, W.	1	.....	Wellington, S.	.....	1
Essex, N.	1	.....	York, N.	2	.....
Frontenac, N and			District Divisions:		
Addington	19	31	No. I.	11	9
Frontenac, S.	14	14	No. II.	3	6
Glengarry	4	3	No. III.	15	12
Grey, E.	3	1	No. IV.	1	15
Grey, S.	5	1	No. V.	7	2
Grey, W.	3	.....	No. VI.	7	3
Hastings, C.	4	5	No. VII.	11	6
Hastings, N.	2	3	No. VIII.	8	8
Lanark, W.	21	10	No. IX.	11	9
Leeds and Grenville,			No. X.	10	9
No. 1	5	3	No. XI.	7	13
Leeds and Grenville,			No. XII.	15	18
No. 2	1	2	No. XIII.	15	28
Leeds and Grenville,			English-French Divisions:		
No. 3	7	3	No. IA.	3	.....
Lennox	12	29	No. IIA.	22	1
Norfolk	2	1	No. IB.	8	.....
Northumberland and			No. IIB.	4	8
Durham, No. 1	1	1			
Northumberland and			R. C. Separate School		
Durham, No. 3	3	7	Divisions:		
Ontario, N.	1	1	No. I.	1	3
Ontario, S.	1	.....	No. III.	.....	2
Oxford, N.	1	.....	No. IV.	8	19
Peel	.....	2	No. V.	11	41
Peterborough, E.	5	11	No. VI.	3	1
Peterborough, W. and,			No. VII.	25	44
Victoria, E.	5	1			
Prescott and Russell	14	29	Totals	409	454
Prince Edward	2	2			
Renfrew, N.	1	7			

APPENDIX U

ORDERS-IN-COUNCIL

H. Bond appointed Superintendent of Building and Grounds at the Ontario School for the Blind. Approved 7th Jan., 1921.

Miss Cassie Willoughby appointed School Nurse, Department of Education. Approved 14th Jan.

Memorandum of Agreement made with the Governors of the University of Toronto in connection with the Ontario College of Education. Appointments to the College staff of instructors, and courses of study, approved 18th Jan.

Miss Bertha E. Johnson appointed School Nurse. Approved 24th Jan.

Public and Separate School Regulations of 1915 in reference to Night Schools amended. Approved 25th Jan.

Miss Nettie Edna Howey appointed School Nurse. Approved 25th Jan.

Agreement with The T. Eaton Company, Limited, respecting the right to print, publish and supply the Ontario Readers for use in the schools. Approved 7th Feb.

Regulations, Instructions and Courses of Study in Elementary Agriculture and Horticulture for Public and Separate Schools as contained in Circular No. 13 of 1919 amended. High School Regulations of 1914 amended. Approved 10th Feb.

Dr. Lucy Grace Neelands appointed Medical Inspection Officer, Department of Education. Approved 10th Feb.

Amendments to the Public School Regulations respecting Medical Inspection of schools. Approved 15th Feb.

Amendments to the Regulations of 1918 as contained in Circular No. 34 further amended in reference to a school holiday. Approved 17th Feb.

Agreement with the Macmillan Company of Canada, Limited, respecting the right to print, publish and supply "The Ontario High School Physical Geography" for use in the schools of Ontario. Approved 22nd Feb.

Agreement with the Copp, Clark Company, Limited, respecting the right to print, publish and supply "The Ontario High School Physics" and "The Ontario High School Laboratory Manual in Physics" for use in the schools of Ontario. Approved 22nd Feb.

D. T. Walkom, B.A., appointed Inspector of District Public Schools. Approved 24th Feb.

Miss M. E. Saunderson appointed Private Secretary to the Minister of Education. Approved 24th Feb.

Agreement with the Copp, Clark Company, Limited, respecting the right to print, publish and supply the Ontario Public School Composition and Grammar for use in the schools of Ontario. Approved 24th Feb.

J. P. Clougher appointed Clerk in the Department of Education. Approved 25th Feb.

Miss Winifred Davison appointed Visitors' Attendant at the Ontario School for the Blind. Approved 1st March.

Regulations re Validity of Teachers' Certificates as contained in Circular No. 30½, 1921. Approved 1st March.

Instructions to School Inspectors on the Apportionment of the Legislative Grants among the Public and Separate Schools of the Counties as contained in Instructions No. 12, and of the Districts as contained in Instructions No. 13. Approved 4th March.

Miss Bessie Katherine Jackson appointed Provincial School Nurse. Approved 16th March.

Instructions to Presiding Officers and Candidates for the Departmental and Matriculation examinations, 1921, as contained in Instructions No. 5. Approved 22nd March.

Instructions No. 13 to Public and Separate School Inspectors in the Districts amended. Approved 5th April.

Regulations respecting grants to Public Libraries. Approved, 7th April.

Regulations as contained in Circular No. 16A of Aug., 1920, regarding "The Qualifications of Holders of First Class Certificates" amended. Approved 7th April.

E. F. Wilkins appointed Farmer at the Ontario School for the Deaf. Approved 7th April.

Instructions to Inspectors, Presiding Officers and Candidates in connection with the "Junior High School Entrance and Junior Public School Graduation Examinations, 1921," as contained in Circular 57. Approved 11th April.

"General Announcement of Summer Courses, 1921," as contained in Circular 55. Approved 4th May.

Certificate as "Approved School Nurse" to be issued to nurses completing satisfactorily the course at the Summer School for School Nurses. Approved 4th May.

Miss Mary Fletcher appointed Housemaid, and Miss Annie Blake appointed Supervisor, School for the Deaf. Approved 12th May.

Regulations and Courses for the Summer Model Schools, 1921, as contained in Circular 4B. Approved 12th May.

General Announcement of Summer Courses amended. Approved 2nd June.

General Announcement of Summer Courses again amended. Approved 7th June.

Text Book Regulations as contained in Circular 14, and the Departmental Examinations of 1922 as contained in Circular 58. Approved 10th June.

Edward B. Lally appointed teacher at the School for the Deaf. Approved 20th June.

W. Casey appointed Stationary Engineer at the London Normal School. Approved 28th June.

Regulations re English-French Summer Schools for professional training amended so as to permit of the establishment of one at Vankleek Hill. Approved 6th July.

Changes in the Courses of Study and Examination Requirements in Continuation Schools, High Schools, and Collegiate Institutes. Approved 13th July.

Regulations, Courses of Study and Examinations of the Normal Schools for Second Class and Kindergarten-Primary Certificates, 1921-22, as contained in Circular 23. Approved 13th July.

Regulations, Courses of Study and Examinations of the Normal Schools for First Class Certificates, 1921-22. Approved 19th July.

Instructions No. 12 and No. 13 amended. Approved 19th July.

Miss Erma Panter, and Miss Emily Mary Haugh appointed Teachers at the School for the Deaf. Approved 29th July.

General Announcement of Summer Courses amended. Approved 11th Aug.

Special list of schools in accordance with the provisions of Circular No. 30½ as contained in Examination Circular No. 142 of 1921. Approved 11th Aug.

Miss Lena Evelyn Monaghan appointed Teacher of Household Science at Ottawa Normal School. Approved 11th Aug.

Miss Jean Burns appointed Teacher, and Mr. J. G. Galloway appointed Musical Director at the School for the Blind. Approved 24th Aug.

John Pollock appointed Boys' Supervisor at School for the Blind. Approved 24th Aug.

Harvey A. Bonney appointed Stationary Engineer at Peterborough Normal School. Approved 13th Sept.

Miss Edith Victoria Phillips appointed Teacher at Toronto Normal School. Approved 13th Sept.

Miss Evelyn Maude Everson appointed Instructor in the Household Science Department of the Stratford Normal School. Approved 13th Sept.

Miss Helen D. Shearer appoitned School Nurse. Approved 13th Sept.

C. T. Sharpe appointed Teacher at the Toronto Normal Model School. Approved 13th Sept.

Frederick W. Schnick appointed Teacher at the Toronto Normal Model School. Approved 13th Sept.

William C. McKendry appointed Teacher at the Ottawa Normal Model School. Approved 13th Sept.

Recommendations and Regulations dealing with the enforcement of the School Attendance Act, 1919, and the Adolescent School Attendance Act, 1919, as contained in Circular A A No. 1 of 1921. Approved 13th Sept.

"Changes in the Courses of Study and the Examination Requirements in Continuation Schools, High Schools, and Collegiate Institutes," dated Aug., 1921. Approved 13th Sept.

Miss Hilda M. Dutton appointed Teacher at the Ontario School for the Deaf. Approved 13th Sept.

Regulations, Courses of Study and Examinations of the Autumn Model Schools, 1921, as contained in Circular No. 4. Approved 13th Sept.

Regulations and Courses for the English-French Model Schools, 1921-22, as contained in Circular 4½. Approved 13th Sept.

Public School teachers who complete an approved course in Sewing to be granted a certificate to teach Sewing. Approved 27th Sept.

Floyd Hartley appointed Teacher at the Northern Academy, Monteith. Approved 27th Sept.

Courses of the Ontario College of Education, 1921-22. Approved 27th Sept.

Karl C. Van Allen appointed Teacher in the School for the Deaf. Approved 27th Sept.

Appointment of the following persons to the School for the Deaf. Approved 27th Sept. :

Miss Clara Coombe, as Nurse; W. Smith, as Boys' Supervisor; Mrs. L. G. Williams, as Seamstress; Miss A. B. Scofield, as Assistant Matron and Domestic Science Teacher.

Miss M. Maud Watterworth appointed Kindergarten-Primary Teacher in the Toronto Normal Model School. Appointed 28th Sept.

Agreement with the Macmillan Company of Canada, Limited, respecting the right to print, publish and supply the "Ontario High School French Reader" (new edition, 1921.) for use in the schools. Approved 4th Oct.

W. J. Karr, of Ottawa Normal School, appointed Director of Rural Education. Approved 11th Oct.

Amendment to Instructions No. 12 and No. 13 in reference to villages and towns amended. Approved, 11th Oct.

The staffs of the Legislative Library and the Department Library reorganized and the following persons, selected from both staffs, appointed, 19th Oct., to conduct the work of the joint Libraries:

A. T. Wilgress: Geo. E. Barnes; Miss G. King; Hugh Ray; Miss M. O. Bright; and Mrs. E. J. O'Neill.

Dr. Agnes A. Curtin, appointed Medical Inspection Officer Department of Education. Approved 9th Nov.

F. P. Gavin, B.A., appointed Assistant Director of Industrial and Technical Education. Approved 9th Nov.

Public School Courses of Study and Examination Requirements in Form V as contained in Circular No. 33, and the "Announcement re the Lower School Course in Latin Grammar, the Middle School Course in History and the Middle and Upper School Courses in the Languages for Departmental Examinations, 1922," as contained in Circular 58 A. Approved 29th Nov.

Dr. Elizabeth Kiteley appointed as a Medical Inspection Officer, Department of Education. Approved 29th Nov.

John Spanner appointed Printing Instructor at the School for the Deaf. Approved. 29th Nov.

Milton G. Sorsoleil appointed District Organizer of Industrial and Technical Schools. Approved 29th Nov.

The following appointments approved 29th Nov. :

S. J. Keys, B.A., D.Pæd, Departmental Master at the Ottawa Normal School.

Jos. W. Firth, B.A., Departmental Master at the Toronto Normal School.

Horace W. Kerfoot, B.A., Departmental Master at the Ottawa Normal School.

John G. McEachern, Departmental Master at the London Normal School.

Thornton Mustard, Principal of the Toronto Normal Model School.

C. D. Bouck, Assistant in the Toronto Boys' Normal Model School.

Members of the Supervising Board of Examiners for 1921-22 appointed Approved, 29th Nov.

Members of the Board of Examiners for the Departmental Middle and Upper School and Matriculation Examinations, 1921-22, appointed. Approved 29th Nov.

Agreement with The Macmillan Company, Limited, respecting the right to print, publish and supply the Ontario High School Beginners' Botany, and the Ontario High School Beginners' Zoology for use in the schools of Ontario. Approved 8th Dec.

Agreement with the Ryerson Press respecting the right to print, publish and supply the Ontario Public School History of England (new edition) for use in the schools of Ontario. Approved 21st Dec.

Agreement with the Ryerson Press respecting the right to print, publish and supply the Ontario Public School History of Canada for use in the schools of Ontario. Approved 21st Dec.

Recommendations and Regulations for the establishment, organization and management of Vocational Schools and of Vocational Departments in the Secondary Schools. Approved 21st Dec.

Thomas S. Melady appointed Separate School Inspector. Approved 22nd Dec.

Norman Campbell appointed Head of the Public School Department in the Northern Academy. Approved 29th Dec.

APPENDIX V

PROVINCIAL NORMAL AND MODEL SCHOOLS

I. Normal School, Hamilton

Staff, January, 1922.

F. F. Macpherson, B.A.....Principal : Literature, Reading, Spelling and French.
E. T. Seaton, B.A., B.Pæd.....Master : Mathematics and School Management.
G. O. McMillan, M.A., B.Pæd.....Master : Science, Nature Study and Agriculture.
Harold E. Amoss, B.A., D.Pæd.....Master : Science of Education and Geography.
H. G. Lockett, M.A.....Master : Composition, Grammar, History and Latin.
A. J. Painter.....Instructor : Manual Training.
Julien R. Seavey.....Instructor : Art.
Miss Clara E. Elliott.....Instructor : Household Economics and Hygiene.
H. A. Stares, Mus. Bac.....Instructor : Music.
A. J. Park.....Instructor : Writing.
Miss Beatrice Allan.....Librarian.

Students Admitted, Session 1921-22

Male	(I Class, 13 ; II Class, 12)	25
Female	(I Class, 17 ; II Class, 154)	171
Total		196

II. Normal School, London

Staff, January, 1922.

John Dearness, M.A.....Principal : School Management and Science.
A. Stevenson, B.A., B.Pæd.....Master : Science of Education and Literature.
E. T. White, B.A., B.Pæd.....Master : Mathematics.
G. W. Hofferd, M.A., B.Pæd.....Master : Science and Geography.
T. E. Clarke, B.A., B.Pæd.....Master : English.
J. G. McEachren, B.A., B.Pæd.....Master : History.
Sugden Pickles.....Instructor : Manual Training.
S. K. Davidson.....Instructor : Art.
Miss A. B. Neville.....Instructor : Household Economics.
C. E. Percy.....Instructor : Music.
Albert Slatter.....Instructor : Physical Culture.
J. W. Westervelt.....Instructor : Writing.
Miss L. Gahan.....Librarian.

Students admitted, Session, 1921-1922

Male	(I Class, 13 ; II Class, 20)	33
Female	(I Class, 32 ; II Class, 169)	201
Total		234

III. Normal School, North Bay

Staff, January, 1922.

A. C. Casselman.....Principal : History, Reading and Geography.
J. C. Norris, M.A., B.Pæd.....Master : Mathematics, School Management, and Science of Education.
J. A. Bannister, B.A.....Master : Composition, Grammar, and Literature.
H. E. Ricker, M.A.....Master : Science, Nature Study and Agriculture.
J. E. Chambers.....Instructor : Manual Training and Writing.
C. Ramsay.....Instructor : Art.
Miss Mayme C. Kay.....Instructor : Household Economics.
Herbert Wildgust, L.L.C.M.....Instructor : Music.

Students admitted, Session, 1921-1922

Male	14
Female	123
Total	137

IV. Normal School, Ottawa

1. Staff, January, 1922

J. F. White, LL.D.	Principal : School Management and English.
S. J. Keys, B.A., D.Pæd.	Master : Science of Education and English.
J. D. Campbell, B.A.	Master : Mathematics and History.
G. A. Miller, M.A., B.Pæd.	Master : Science and Nature Study.
F. A. Jones, M.A., D.Pæd.	Master : Geography and Composition.
H. W. Kerfoot, B.A.	Master : Classics, Grammar and Literature.
J. S. Harterre	Instructor : Manual Training.
Roy F. Fleming	Instructor : Art.
Miss C. E. Green	Instructor : Household Economics.
Miss L. Monaghan	Instructor : Household Economics.
T. A. Brown	Instructor : Music.
C. Emery	Instructor : Physical Culture.
J. M. Fleury	Instructor : Moderns to I Class students.
C. J. Logan	Instructor : Writing.
E. Laura Argue, B.A.	Librarian.

Students admitted, Session, 1921-1922

Male	(I Class, 0 ; II Class, 27)	27
Female	(I Class, 16 ; II Class, 190)	206
Total		233

2. Staff of Normal Model School, Ottawa, January,1922

C. E. Mark,, B.A., D.Pæd.	Headmaster, V Form, Boys and Girls.
H. M. Leppard, B.A.	IV Form, Boys, Sr.
A. W. McGuire, B.A.	IV Form, Boys, Jr.
W. J. McKendry, B.A.	III Form, Boys.
Miss Rose Lynch	II Form, Boys.
Miss Elsie Sherin	I Form, Boys.
Miss A. G. Hanahoe	IV Form, Girls.
Miss E. Cluff, B.A.	III Form, Girls.
Miss A. M. Delaney	II Form, Girls.
Miss M. R. Elliott	I Form, Girls.
Miss Lilias M. Henderson	Kindergarten-Primary.
Miss A. H. Baker	Kindergarten Directress.
Miss Gladys McClenaghan	Kindergarten Assistant.
J. S. Harterre	Instructor : Manual Training.
Roy F. Fleming	Instructor : Art.
Miss L. Monaghan	Instructor : Household Economics.
T. A. Brown	Instructor : Music.
C. Emery	Instructor : Physical Culture.
J. M. Fleury	Instructor : French.

Number of pupils, 1921	365
Number of Kindergarten pupils, 1921	42
Total	407

V. Normal School, Peterborough

Staff, January, 1922.

Duncan Walker, B.A.	Principal : Mathematics and School Management.
Henry G. Park, B.A., D.Pæd.	Master : Science of Education and English.
Adrian Macdonald, M.A.	Master : English.
Alonzo J. Madill, B.A.	Master : Science and Agriculture.
Elmer E. Ingall, B.A.	Master : History and Geography.
A. F. Hagerman	Instructor : Manual Training.
Miss Jessie C. McRae	Instructor : Art.
Miss Elizabeth MacVannel	Instructor : Household Economics.

Miss Marion R. Rannie.....Instructor : Music and Physical Culture.
John A. McKone.....Instructor : Writing.
Miss Effie M. Munro.....Librarian.

Students admitted, Session, 1921-1922

Male	19
Female	135
Total	154

VI. Normal School, Stratford

Staff, January, 1922.

S. Silcox, B.A., D.Pæd.....Principal : Science of Education, and Spelling.
J. W. Emery, B.A., D.Pæd.....Master : Science, Nature Study and Agriculture.
J. W. Forbes B.A.....Master : Mathematics and School management.
H. G. Martyn, B.A.....Master : Grammar, Literature and Reading.
H. G. Manning, B.A.....Master : Composition, Geography and History.
Sugden Pickles.....Instructor : Manual Training.
Mrs. Helen Mayberry.....Instructor : Art.
Miss E. M. Everson.....Instructor : Household Economics and Hygiene.
J. Bottomly, A.R.C.O.....Instructor : Music.
Miss E. M. Cottle.....Instructor : Physical Culture, and Writing.
Miss A. J. Johnson.....Librarian.

Students admitted, Session, 1921-1922

Male	29
Female	171
Total	200

VII. Normal School, Toronto

1. Staff, January, 1922

S. J. Radcliffe, B.A .....Principal : Literature and Advanced Reading.
Wm. Prendergast, B.A., B.Pæd.....Master : Mathematics and Hygiene.
David Whyte, B.A.....Master : Science and Geography.
R. H. Walks, B.A.....Master : School Management and History.
S. J. Stubbs, B.A.....Master : Science of Education and Grammar.
John W. Firth, B.A.....Master : Nature Study and Agriculture.
Miss Mary E. Macintyre.....Instructor : Kindergarten Principles.
Miss Ellen Cody.....Instructor : Kindergarten Assistant.
Jas. H. Wilkinson.....Instructor : Manual Training.
Miss A. Auta Powell.....Instructor : Art.
Miss Nina A. Ewing.....Instructor : Household Economics.
Miss Gladys M. Breed.....Instructor : Household Economics.
A. T. Cringan, Mus. Bac.....Instructor : Music.
Miss Miriam Thompson.....Pianist.
Mrs. Jean Somers.....Instructor : Physical Training.
Major E. H. Price, S. of M.....Instructor : Physical Training.
A. F. Hare.....Instructor : Writing.
Mrs. M. W. Brown.....Instructor : Reading.
Miss Jean Merchant.....Librarian.

Students admitted, Session, 1921-1922

Male.....(I Class, 16 ; II Class, 36).....	52	
Female....(I Class, 35 ; II Class, 205).....	240	
		292
Kindergarten-Primary Students		35
Total		327

2. Staff of Normal Model School, Toronto, January, 1922

Thornton Mustard	Headmaster.
Miss M. K. Caulfeild	First Female Assistant
Miss A. F. Laven	Assistant.
Francis M. McCordic	First Male Assistant.
Miss Jessie I. Cross	Assistant.
John C. Jordan	Assistant.
Miss Isabella Richardson	Assistant.
Miss Alice A. Harding	Assistant.
Miss Edith V. Phillips	Assistant.
Charters T. Sharpe	Assistant.
Frederick W. Schnick	Assistant.
Clarence D. Bouck	Assistant.
Miss Lilian B. Harding	Kindergarten-Primary.
Miss Maud Watterworth	Kindergarten-Primary.
Miss Mary E Macintyre	Kindergarten Directress.
Miss Ellen Cody	Kindergarten Assistant.
Jas. H. Wilkinson	Instructor : Manual Training.
Miss A. Auta Powell	Instructor : Art.
Miss Nina A. Ewing	Instructor : Household Economics.
Miss Gladys M. Breed	Instructor : Household Economics.
A. T. Cringan, Mus. Bac	Instructor : Music.
Miss Miriam Thompson	Pianist.
Mrs. Jean Somers	Instructor : Calisthenics.
Major E. H. Price, S. of M	Instructor : Drill.
Mrs. G. de Lestard	Instructor : French.

Number of pupils in 1921	554
Number of Kindergarten pupils in 1921	39
Total	593

VIII. Summary of Attendance at the Normal Schools

Normal Schools	I Class		II Class		Totals		Grand Totals
	Male	Female	Male	Female	Male	Female	
Hamilton	13	17	12	154	25	171	196
London	13	32	20	169	33	201	234
North Bay	.....	.....	14	123	14	123	137
Ottawa	.....	16	27	190	27	206	233
Peterborough	.....	.....	19	135	19	135	154
Stratford	.....	.....	29	171	29	171	200
Toronto	16	35	36	205	52	240	292
Totals	42	100	157	1,147	199	1,247	
Grand Totals	I Class, 142		II Class, 1,304				1,446

In addition to the above there were 35 Kindergarten-Primary students at Toronto Normal School.

APPENDIX W

MODEL SCHOOLS

I. Autumn Model Schools, 1921

School	Principal	Attendance			Extra Mural	Limited Third Class Certificates	District Certs. for two years	Provisional ThirdClass Certs. for one year
		Total	Male	Female				
Clinton	C. D. Bouck	7	3	4	.....	7	.....	.....
Cornwall	G. R. Theobald	22	2	20	1	21	.....	1
Kingston	W. F. Inman	15	3	12	5	20	.....	.....
Orillia	C. L. T. McKenzie	12	1	11	2	14	.....	.....
Renfrew	W. T. Baker	21	0	21	1	22	1	.....
Totals	.....	77	9	68	9	84	1	1

II Summer Model Schools, 1921

School	Principal	Attendance			Extra Mural	Limited Third Class Certificates	District Certificates
		Male	Female	Total			
Bracebridge	E. E. Ingall	11	125	136	1	28	102
Gore Bay	W. J. Karr	7	42	49	.....	8	41
Madoc	R. A. A. McConnell	8	57	65	.....	.....	61
Ottawa	C. H. Edwards	0	31	31	2	8	21
Port Arthur	J. H. W. McRoberts	2	31	33	.....	6	26
Sharbot Lake	W. F. Inman	3	49	52	1	19	33
Sturgeon Falls	J. M. Kaine	1	44	45	.....	5	30
Vankleek Hill	John Hartley	0	13	13	.....	2	11
Totals	.....	32	392	424	4	76	325

APPENDIX X

LIST OF ASSOCIATE EXAMINERS AND CONTINUATION AND HIGH SCHOOL PRINCIPALS AND ASSISTANTS

1. Associate Examiners, 1921.

Model Entrance, Lower School, Senior High School Entrance and Senior Public School Graduation Diploma

Agriculture: W. A. Porter, A. M. Woodley.

Algebra and Geometry: F. C. Asbury, D. R. Fletcher.

Arithmetic: A. H. S. Adams, W. A. Adams, Edna M. Boyle, L. H. Clarke, M. L. Cornell, L. K. Devitt, J. Elliott, A. J. Foerster, R. B. Goring, E. D. Hendry, J. T. Jenkins, W. J. Lamb, Margaret D. McDonald, R. N. McKenzie, E. D. Manning, Katie B. O'Connor, W. S. Steele, F. Tanton, J. F. West.

Art: Vivian E. Clayton, Ethel L. Fothergill, A. Edith Giles, Hanna M. Goulding, Gwendolyn B. Jones, Eva F. MacKenzie, Sara M. McBride, Jessie A. McKillop, Tena Martyn, Mabel Money, Christina B. Nichol, Ida E. Norton, S. W. Perry, Elsie M. Rice, Mae H. Ryan, Margaret Sinclair, Eva M. Somerville, Olive Tierney.

Bookkeeping and Writing: Ruth B. Heather, J. A. Ramsay, Margaret Tuer, D. M. Walker.

Composition: Mabel C. Johnston.

Geography: Edith Adams, Mary Bell, Clara Broughton, C. A. Bryan, H. J. Case, Emelyn E. Delmage, H. C. Dore, H. A. Doupe, G. E. Ellis, W. A. Evans, C. M. Ewing, H. G. Feasby, W. H. Fletcher, Mary M. Gordon, Luella Grainger, H. W. Hall, O. J. Henderson, S. H. Henry, A. Hisey, Margaret Holmes, Katherine M. Jackson, Alice C. Kelso, L. H. Kirby, Gladys R. Kirk, J. H. S. Leuty, Bertha M. Ranson, L. M. Richardson, J. M. Roszel, L. J. Stapleton, Ethyle M. Stark, L. Stevenson, E. H. G. Worden.

English Grammar: J. M. Adams, Mabel Allen, Lily M. Bell, Hattie L. Chown, W. F. Darroch, Mabel C. Edwards, Ruth W. Haines, Mary A. Hill, Harriett Ingham, Jessie Keagey, Jessie S. Kilpatrick, Eva W. King, Evelyn McDonald, Annie K. McGregor, Janet McLochlin, Pearl McPherson, Blanche Mitchell, Lillian G. Mitchell, Susan P. Morgan, Winnifred Morris, W. E. O'Brien, A. E. O'Neill, Mabel Roberts, Wilhelmina D. Rutherford, Annie J. Stewart, Muriel J. W. Wallace.

History: Anna F. Almas, F. M. Winnifred Bell, Josephine Chambers, Isabel Clement, Florence Corkery, Margaret M. Dawson, Muriel Duncan, A. H. Dunnett, Florence M. Ewing, Roberta Gilray, S. P. Griffin, L. S. Hart, Philippa A. V. Hickey, Evelyn Hicks, May B. Hiscock, J. B. Kaiser, W. L. Keeling, Sada MacIntyre, Emma L. Mackay, J. G. McEachern, Hazel McGibbon, Rose McQueen, Isabel C. Mitchell, Stella K. Mott, J. P. S. Nethercott, Evelyn M. Rutledge, Winona Stewart, Agnes C. Sweeney, Josie E. Switzer, Lillie A. Traver.

Literature: Maude Chalmers, Agnes I. Hamilton.

Elementary Science: D. Brown, G. A. Campbell, R. H. Carbert, C. S. Carter, Charles H. Danard, W. J. Dowkes, C. G. Dunlop, C. G. Fraser, E. H. Glenn, H. W. Graham, Una M. Harris, E. Meryl Hicks, K. S. Hill, J. S. Jackson, Guy E. Johnson, Anna Kennedy, Evelyn I. MacNaughton, Alice McCoig, Vivian C. McDonald, Mary McEachran, R. W. E. McFadden, E. G. Miller, Mary H. Rutherford, W. W. Smith, Bertha R. Stewart, J. Tanton, H. E. Thompson, H. S. White, L. J. White.

Household Science: Clara E. Elliott, Evelyn M. Everson, Frances P. Prichard, Mary P. Shaw.

Spelling: J. H. Adams, Leita E. Arnold, Gladys I. Brewster, A. A. Cameron, Mrs. Ethel Currie, Eugenie M. DeFoe, W. S. Ferguson, F. M. Hicks, Maggie Keough, Mrs. Jeanette MacGregor, Jennie McDowell, E. F. Milburn, H. L. Smith, E. M. H. Ward.

Writing: J. J. Bailey, A. F. Birchard, Charlotte Burk, Elvina M. Cummer, S. B. Hatch, Annie L. Hudson, C. E. Jamieson, Bertie L. Lindsay, Mary A. Moir, Lizzie Pirie, Mamie G. Quinn, Alice M. Tanner, Annie M. Tanner, C. M. Trace.

Middle School and Pass Matriculation Associate Examiners

Algebra: C. S. Allin, N. E. Challen, D. H. Coates, J. D. Dickson, A. W. Ferguson, T. M Henry, H. G. S. Jeffrey, C. F. Lawrence, J. McKellar, A. F. McKillop, J. McQueen, A. H. D. Ross, W. G. Spencer, A. E. Thompson.

Art: A. R. Barton, F. Hood, S. W. Perry, L. Wheelton.

Chemistry: F. J. Barlow, E. M. Bigg, C. W. Butcher, R. D. P. Davidson, T. W. Elliott, J. Gilchrist, E. J. Halbert, J. A. Hamilton, E. H. Jolliffe, G. E. Kennedy, R. G. Lawlor, R. H. Leighton, F. McNabb, A. R. McRitchie, G. W. Morden, B. P. Overholt, T. Preston, G. E. Ramage, G. A. Robertson, W. H. Tuke, D. A. Welsh, A. Williams, J. S. Wilson, D. T. Wright.

Compostiion: Jessie M. Bell, W. N. Bell, Lillian M. Campbell, M. Ada Dickey, Lena Dufton, T. E. Elliott, W. E. Hanna, E. A. Hardy, Nora Lewis, G. L. MacDonald, Margaret C. McGregor, H. C. Mann, J. H. Mowat, Mabel Nesbitt, C. F. Price.

French Authors: Annie B. Brain, Evelyn E. Conlin, Elizabeth Dall, I. Goldstick, Ethel R. Guthrie, Mrs. Lulu M. Jamieson, Maybelle G. Kerr, D. MacKay, H. S. McKellar, Amy A. Newton, Claribel Platt, Margery E. Ross, Gertrude Ryan, Marion Wilkie.

French Composition: G. S. Bale, L. J. Clark, J. O. Clothier, J. Louise Galloway, Alexandra Howson, Mary W. Hubbs, Rachel L. L. Jones, C. A. Latour, Marie MacMinn, W. J. McAndrew, H. M. Magee, A. A. Norton, Kathleen T. O'Shaughnessy, Marion H. Rose, Agnes M. Stuart, W. H. Williams.

Geometry: Frances M. Ashall, Agnes Breen (Sr. M. Lucilla), A. D. Campbell, G. S. Campbell, Martha Fitch, G. W. Keith, Jennie A. Kinnear, H. C. Kinnee, J. H. Knowles, R. N. Merritt, E. G. Powell, C. W. Robb, Roberta M. Sillers, A. L. Stilwell, Susan A. VanAlstyne, R. Whyte.

German: Lydia A. Barr, Bertha C. Herington, Jessie Muir, J. D. Robins.

Ancient History: Agnes W. F. Balfour, W. J. C. Barrett, D. Breslove, C. J. Burns, Carrie L. Costin, Euphemia J. Cowan, W. J. Fenton, Grace A. Gillespie, F. Grace T. Hall, Mary A. Harris, J. I. Hutchison, William Kelly (Brother Francis), R. H. King, Ina H. McCauley, Alma Matthews, Annie B. Millar, Kathleen V. Moore, A. W. Morris, Janet Penfold, Mabel Powell, Ralph Ross, Minnie C. Runians, Myrtle H. Stevens, J. W. Treleaven.

British and Canadian History: G. N. Bramfitt, J. O. Carlisle, Jessie S. Cattanach, Viola J. Dobson, Mina B. Donnelley, J. J. Edwards, Kathleen B. Ferris, W. K. Foucar, Helen A. Franklin, W. A. Glass, Ethel E. M. Hammell, Edith P. Husband, A. Johnson, A. E. Judge, E. Blanche MacLeod, W. G. McNeill, Alice A. McRae, A. McVicar, S. A. Morrison, W. Mowbray, B. Teresa O'Reilly, L. J. Pettit, Frances M. Quinlan, J. F. VanEvery.

Latin Authors: R. T. Andrews, W. D. T. Atkinson, L. Brown, E. U. Dickenson, P. K. Hambly, H. J. Haviland, Hazel F. Hay, R. S. Jenkins, Katie B. Johnston, Lillie E. V. Lloyd, J. M. McKinley, G. B. McQuarrie, G. E. Mabee, Frances D. Morden, C. A. Shaver, Laura A. Smithson, W. J. S. Southcombe, J. N. Woodcock.

Latin Composition: F. H. Butcher, J. C. Clark, Marjorie Colbeck, Nora G. Dewar, A. W. Dunkley, Jessie E. Eckhardt, W. A. Graham, Alice E. Gregory, J. H. Hardy, W. D. Lowe, W. R. McCamus, C. McKinnon, C. A. Mayberry, Riddell, F. P.

Literature: Mabel M. J. Baird, Mary J. Bull, J. A. Cooke, Mary C. Edge, Grace Edwards, M. Erb, R. S. Foley, Jessie Foster, Christine Fraser, D. A. Gilchrist, L. C. A. Hodgins, A. J. Husband, Jessie Kennedy, Florence I. Knight, Isabella J. MacDougall, C. Lillie Maclennan, Jessie Maitland, Persie C. Meadows, Leonora Park, Mary K. Rodden, J. E. Skeele, Ruth Stewart, May M. Taylor, Janie Thomas, C. J. Thoms, Countess L. Twiss.

Physics: J. S. Bell, J. E. Burchell, J. G. Cameron, M. Cameron, G. A. Cline, Hannah Connors, (Sr. M. Carmelita) H. Davidson, W. M. Erwin, C. F. Ewers, W. B. Forbes, E. H. Greig, J. R. Hamilton, R. D. Keefe, C. A. K. Lehmann, A. C. Lewis, P. MacKichan, J. E. Marcellus, A. Pearson, Nellie M. Philip, W. R. Saunders, D. E. Smith, T. C. Smith, E. J. Wethey, R. H. Young.

Upper School and Honour Matriculation Associate Examiners

Classics: H. W. Bryan, Beatrice L. Fletcher, W. B. L. Howell, J. T. Lillie, F. H. Lingwood, F. J. A. Morris, Mrs. E. K. Urquhart, G. E. Will.

Composition: Minnie F. Libby, Ethel Seeley, Kate L. Stewart, E. H. A. Watson.

French and German: A. W. Baird, Janet Carter, Pearl B. Faint, Jessie Houston, H. W. Irwin, Agnes Mackintosh, Aileen Noonan, Marion I. Whyte.

History: J. A. Carlyle, P. T. Jermyn, Mary McCallum, Mary H. O'Donoghue, R. Stothers.

Literature: Margaret Clifford, W. Elmslie, W. N. Sexsmith, Isabel K. Smith, Grace M. Strang.

Mathematics: O. Asselstine, Edith R. Delmage, L. R. Halnan, W. P. Hedley, T. Kennedy, T. A. Kirkconnell, J. M. Lawr, G. V. Maclean, S. Martin.

Science (Physics, Chemistry, Mineralogy): C. C. Arthur, Annie A. Boyd, J. C. Doherty Thomas Firth, T. H. Follick, L. H. Graham, W. J. Haydon, E. O. Leibner, H. S. Rosevear, F. D. Wallace.

Science (Botany and Zoology): J. F. Calvert, F. J. Johnston, B. E. Leckie, W. E. Shales, A. R. Walker.

II. List of Principals and Assistants of Continuation Schools, January, 1922

Post Office and Name of School	Names and professional qualifications of Teachers (Unless otherwise stated, the teacher is the holder of a Permanent First Class or a High School Assistant's certificate.)	Degrees	Specialists	Elementary and Intermediate Certificates (In the case of Agr. and Hor. the Certificate is Intermediate.)	Date of appointment	No. of years' experience in a High or Continuation Sch.	No. of years in a Public School	Salaries		
								Principal	Male Assistants	Female Assistants
								$	$	$
Aberfoyle	Hood, Grace Isabel....(Int.)			Art	1920	1½	....	1,250	.....	.....
Acton	Knapp, Elizabeth E.		Phys. Cul....(Int.)	Art	1920	3½	4	1,800	.....	.....
	Lewis, Gordon.....(Int.)			Phys. Cul.	1921	1½	½	.....	1,500	.....
†Agincourt, 14 Scarboro'...	Marchant, Gladys O.			Phys. Cul., Art	1920	1½	2	1,400	.....	.....
Ailsa Craig	Bell, John A.			Phys. Cul., Agr.	1920	9	....	2,300	.....	.....
Alvinston	Dolbear, Calla C.		Art	Phys. Cul.	1919	3½	2	1,600	.....	.....
	McAlpine, Agnes				1921	½	5	.....	.....	1,200
Arkona	Stevens, Violet E.			Art	1920	1½	6	1,450	.....	.....
Ayr	Whelan, Anna M.			Phys. Cul.	1921	3½	3	1,800	.....	.....
	Fitzgerald, Willa S.....(Int.)				1921	½	1	.....	.....	1,200
Bancroft	Prosser, Thornton....(Int.) **		Phys. Cul		1920	1½	....	1,700	.....	.....
	Brown, Clara R.....(Int.)			Art	1921	½	....	.....	.....	1,300
Bath	Garvey, Leo J.			Art	1920	3½	2	1,600	.....	.....
	VanAlstyne, Hazel L...(Int.)				1921	½	1	.....	.....	1,000
Beaverton	Morgan, Flora E.			Phys. Cul	1921	9½	3	1,800	.....	.....
	McRae, Alice A.	B.A., Tor		Art	1917	4½	....	.....	.....	1,200

Beeton	Powell, James A	B.A., Queen's		Art., Phys. Cul	1920	3½		1,800		
	Watson, Louisa S				1921	½	9			1,200
Belmont, U 11, S. Dorchester	MacKillop, Oliver M			Phys. Cul	1913	8½	4	2,150		
	Ryckman, Irene M (Int.)			Art	1921	2				1,400
Blenheim	Bryan, Cameron A			Art., Phys. Cul	1921	3	2	2,000		
	Leavitt, Irene			Art	1921	2½				1,500
Blind River	Kemp, Elenor (Int.) **			Art	1921	1	½	1,500		
	Elliott, Gladys S (Int.)				1921	½	1½			1,400
†Blyth	Bell, Mary *			Phys. Cul	1919	6½	1	1,500		
Bolton	Fowler, Alfred C				1920	1½	2½	1,600		
Bothwell	Hicks, Viva M		Art (Int.)		1920	13	1	1,550		
	Gibb, Moyna B (Int.)			Phys. Cul	1920	1½	½			1,200
Bowesville, 5 Gloucester	Hardy, Mrs. Edith A				1921	4	2	1,200		
Bridgeburg	Thompson, Howard E		Phys. Cul. (Int.)		1917	7½	2	2,500		
	Chambers, Josephine	B.A., Tor	Art (Int.)	Phys. Cul	1914	8	½			1,700
	Prentice, Helen M			Phys. Cul	1921	½	3			1,500
Bruce Mines	Wood, Samuel D (Int.) **				1920	1½		1,600		
	McCulloch, Margaret E (Int.)				1921	½				1,300
Brussels	Taylor, Pearl M			Art	1921	2½	1½	1,700		
	Geddes, Mary M			Phys. Cul., Art	1921	3½	2			1,500
Burk's Falls	Alkerton, Nancy E			Art	1921	3½	2	1,900		
	Cronin, Charlotte D (Int.)	B.A., Tor		Art	1921	½				1,400
Cannington	Bigg, Edmund M ‡	M.A., Tor	Sci	Phys. Cul	1917	48		1,600		
	Watson, Mary E			Art	1921	1½	1½			1,200
Cardinal	Clarke, Olive M	B.A., Queen's		Art., Phys. Cul	1920	3½		1,800		
	Surch, Grace E (Int.)				1921	½				1,200
Carp, 3 Huntley	McIntosh, Jean			Phys. Cul	1921	4½		1,800		
	Gillan, Kathleen M		Art (Int.)		1917	4½	2			1,500

*Endorsed for Principalship. **Temporary certificate as Principal. †One teacher devotes full time and one, half time to Continuation School work.
‡High School Principal's certificate.

List of Principals and Assistants of Continuation Schools, January, 1922 (Continued)

Post Office and Name of School	Names and professional qualifications of Teachers (Unless otherwise stated, the teacher is the holder of a Permanent First Class or a High School Assistant's certificate.	Degrees	Specialists	Elementary and Intermediate Certificates (In the case of Agr. and Hor. the Certificate is Intermediate.)	Date of appointment	No. of years' experience in a High or Continuation Sch.	No. of years in a Public School	Salaries		
								Principal	Male Assistants	Female Assistants
								$		$
Chapleau, 1 Chapleau	Kehoe, Martin B	B.A., Queen's	Math. & Phy.(Int.)	Phys. Cul.	1921	4	2	2,500		
	Wallen, Elizabeth J	B.A., Tor.	Eng.&Fr., Ph.Cl(Int)		1921	5½	3½			2,400
Claremont, 15 Pickering	Wilker, Milton J		Phys. Cul. (Int.)		1914	7½	2	1,800		
	Houze, Margaret		Art		1921	3½	1			1,200
Clifford	Edge, Alix M			Art, Ph. Cul., Agr.	1918	3½	1	1,500		
	Tranter, Hazel M			Phys. Cul., Agr.	1920	1½	4			1,300
Cobden	Jackson, May Bell				1921	½	2	1,500		
Cochrane	Grassick, Donald C			Phys. Cul.	1921	1	10	2,500		
Coldwater	Macdonald, Margaret J		Art (Int.)		1921	3½	1	1,700		
	Robinson, Bertha E			Agr.	1921	2	4			1,400
Comber, 4 Tilbury W	Woods, Annie E **				1921	½	3	1,600		
	Wasmann, Ethyle M (Int.)				1921	½				1,300
Cookstown, 5 Essa	McKechnie, Catriona S		Phys. Cul.		1919	3½	3	1,500		
	McKinney, Myrtle J (Int.)			Art	1921	½				1,300
Creemore	MacNaughton, Evelyn I		Art (Int.)	Phys. Cul	1919	4½	2	2,000		
	Edwards, Eleanor J (Int.)				1921	½				1,100
Delaware, 2 Delaware	Conway, Irene E			Art, Phys. Cul.	1916	12	3	1,600		
	Fox, James H (Int.)				1919	2½			1,500	

Delhi	Giddon, Mildred E.		Phys. Cul. (Int.)		1921	4½	3	1,700		
Denbigh, 5 Denbigh	Danford, Frances S. (Int.)			Art	1921	½	1½	1,400		
Devizes	Joness, Evelyn G. (Int.)				1921	½		1,300		
Dorchester	Gould, Ford M.	B.A., Queen's	Art (Int.)	Phys. Cul., Voc. Mus.	1921	2	4½	2,000		
	Currie, Mrs. Ethel			Art	1921	4½				1,400
Drayton	Clark, George A.			Agr., Farm M.	1913	16½	6	2,000		
	Grant, Cora			Phys. Cul., Art	1919	3½	3			1,500
	White, Mary E.			Art	1921	2½				1,500
Dresden	Marwick, Bruce D.			Phys. Cul	1920	5	2	1,700		
	Noy, Doris H. (Int.)				1921	½	1			1,200
†Drumbo, 11 Blenheim	King, Nellie N.				1921	½	3	1,350		
Dryden	Craven, Henry *			Phys. Cul., Art	1921	2½		1,800		
	Awde, Frances Ina				1921	½	2			1,350
Eganville	Stapleton, Louis J.			Phys. Cul	1919	4½	2	1,800		
	Giles, Annie H.			Art	1918	8½	3½			1,300
Eganville (R. C. S. Sch.)	Maher, Margaret (Sr. Mary Aurelia)		Art	Phys. Cul	1914	7½	12½	800		
	Griffin, Elizabeth H. (Sr. Dorothy)				1918	3½	9			700
Elmira	Clarke, Frank B.			Phys. Cul	1920	18½	6	2,100		
	Abel, Margaret H.			Art., Phys. Cul	1921	12	2½			1,600
Elmvale, 5 Flos	Miller, Erle G.			Phys. Cul	1918	4½	4	1,800		
	Burchell, Edith L. (Int.)				1922		1			1,500
Ennismore, 4 Ennismore	Ziehr, Mathilde T. (Int.) ** (Teacher to be appointed)	B.A., Tor.	Art	Phys. Cul	1921	1½		1,600		
†Erin	Guilfoyle, Annie *			Art	1917	11½	1	1,500		

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Post Office and Name of School	Names and professional qualifications of Teachers (Unless otherwise stated, the teacher is the holder of a Permanent First Class or a High School Assistant's certificate.)	Degrees	Specialists	Elementary and Intermediate Certificates (In the case of Agr. and Hor. the Certificate is Intermediate.)	Date of appointment	No. of years' experience in a High or Continuation Sch.	No. of years in a Public School	Salaries		
								Principal	Male Assistants	Female Assistants
								$	$	$
Espanola, U 1 Baldwin and Merritt	Norton, Ida E.		Art. (Int.)	Phys. Cul.	1920	14	5	1,500		
Fenelon Falls	Fennell, Rena L.			Art., Phys. Cul.	1920	3½	2	1,800		
	Steele, Ethyl M. (Int.)				1921	½	1			1,200
Feversham, 7 Osprey	Morris, Clive M.				1920	1½	1	1,200		
Finch	Armstrong, Eunice			Art.	1911	12½	2½	2,000		
	MacTavish, Alice Miriam (Int.)	B.A., Queen's.		Phys. Cul.	1920	1½	5½			1,900
	Thompson, Jessie A. V. (Int.)				1922	....	1½			1,300
Fingal, 12 Southwold	Muckle, Leata W.			Phys. Cul., Art.	1921	2	....	1,600		
	Horton, Dorothy E.			Phys. Cul.	1921	½	3			1,500
Frankford, 11 Sidney	Bell, John M.			Phys. Cul.	1915	6½	31	1,800		
	Relyea, Frances J. (Int.)				1921	½	....			1,300
Gore Bay	Crich, Wilfred V. (Int.) **		Phys. Cul.	Art.	1920	1½	....	1,600		
	Barrington, Ross C. (Int.)				1921	½	1		1,450	
Grand Valley	Russell, Robert V.			Phys. Cul., Art.	1921	2½	....	2,000		
	McNabb, Elinor M.			Art.	1921	½	2			1,200
Hanover	Magee, James A.			Phys. Cul.	1905	18½	2	2,000		
	Strachan, Donald L.	B.A., Queen's.		Phys. Cul.	1920	3	4		1,700	
Harrow, 9 S. Colchester	Wesley, Caroline **				1920	1½	1	1,700		
	Inman, Marjorie E.				1922	....	4			1,700

Havelock	Davidson, John ‡	M.A., LL.B., Tor	Class		1917	40½	3	2,200		
	Brewster, Gladys I.			Phys. Cul., Art	1914	7½				1,400
Hensall	Sharpe, Jessie M.				1921	½	3	1,400		
Hepworth	Fox, Edward W. (Int.)				1921	½		1,300		
Highgate	Burke, Alex.				1913	27½	13	1,800		
	Walker, Mary H.			Phys. Cul., Art	1921	2½				1,300
Holstein, 3 Egremont	Snyder, Vesta J. (Int.)				1921	½		1,400		
Huntsville	Bernath, Alfred C.				1900	20½	5½	2,500		
	Peregrine, H. May			Art	1912	14	2			1,350
	Ross, Pearl			Phys. Cul	1920	2	3			1,050
Ilderton	Caverhill, Elsie M.	B.A., Queen's	Eng. & His. (Int.)	Phys. Cul	1921	6	2	1,600		
	Mark, Jetta M.			Art	1921	½	2			1,200
Iroquois Falls	Day, John W.				1921	11	16	3,000		
Islington, 8 Etobicoke	Elliot, Marion B.			Art	1921	2½		1,600		
Jarvis	Cunningham, Elinor I.			Phys. Cul., Art	1920	1½	5	1,600		
Jockvale, 10 Nepean	Mulvihill, Marguerite P. (Int.)			Phys. Cul	1921	½		1,500		
Kars, U. 3 North Gower	Todd, Hazel A.				1921	½	2½	1,700		
	Stothers, Iona J. (Int.)			Phys. Cul	1921	½				1,400
Keewatin	Adams, John M.			Phys. Cul	1918	10	8	2,400		
	Nelson, Dorothy A.			Art, Phys. Cul	1921	1½	2			1,600
Kenmore, 15 Osgoode	Fraser, Christine M. ‡	B.A., McM		Phys. Cul	1921	7	5	1,800		
	Miller, Sadie G. (Int.)			Art	1921	1½	½			1,400
†Kinburn, 11 Fitzroy	Beach, Eldon R (Int.) **				1921	½	1	1,550		
Lakefield	Simpson, John M. ‡	B.A., Queen's	Phys. Cul	Agr.	1916	12½	9	2,000		
	Stark, Laverna B.		Art (Int.)	Phys. Cul.	1921	5	6			1,400

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List of Principals and Assistants of Continuation Schools, January, 1922 (Continued)

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								Principal	Male Assistants	Female Assistants
								$	$	$
Lakefield—Continued	Corkery, Mary E.		Phys. Cul. (Int.)		1921	1	5½			1,300
Lambeth	La Piere, Marie E.				1921	½	2	1,250		
Lanark	Whiteman, Margaret			Art	1921	1½	4	1,700		
	Foran, Michael M. (Int.)			Phys. Cul	1921	½			1,300	
	Towey, Waveney, (Int.)				1922		½			1,100
Lansdowne, 9 Leeds and Lansdowne Front	Garbutt, Ruby R.			Art., Phys. Cul.	1919	4½	1	1,600		
	Munro, Gladys R. (Int.)				1921	½				1,200
Lion's Head	Simmie, Jean		Art. (Int.)	Phys. Cul	1920	2	2½	1,300		
Little Current	Andrews, Edna L. (Int.)			Art	1921	½		1,500		
Lobo	Anderson, Effie E.			Art, Phys. Cul.	1920	1½	4	1,500		
	Eagleson, Robt. LaV.				1921	2½	1½		1,800	
Lucknow	Ranson, Eva M.			Art	1921	11	3	2,000		
	McLean, Frances E.				1920	12½	6			1,700
†Malakoff, 3 Marlborough	Taylor, Neil A. (Int.) **				1919	2½		1,500		
Manitowaning, 2 Assiginack	Hart, Luther S.		Art.	Phys. Cul	1919	4½	4	1,500		
†Manotick, U. 18 Osgoode	Fair, C. Elizabeth			Art	1921	1	1½	1,500		

Marmora	Stewart, Ruth	B.A., Queen's	Mods & Hist...(Int.)	Phys. Cul.	1920	5½	1	1,600		
	Armstrong, Mabel R.			Phys. Cul.	1921	3½	2			1,400
	Campbell, Alexandra M.(Int.)				1922	½	1			1,400
Massey	Cowan, Ralph B.....(Temp.)				1922			1,500		
Maxville	McDowell, Jennie			Art, Phys. Cul.	1921	6½	10	2,000		
	Sutherland, Jessie M.				1921	½	2			1,300
Melbourne, U 16 Caradoc	Snell, Blanche E. *		Art.....(Int.)		1921	1½	1	1,700		
	Hogg, Isabel R.....(Int.)				1921	½				1,300
Merlin, U 5 Raleigh	Barnby, Vera E.		Phys. Cul.	Art	1920	5½	2	1,700		
	Barnby, Eunice Jean				1921	½	2			1,400
Merrickville	Mazinke, Henrietta E.			Art	1919	8	½	1,600		
	Clement, Isabel			Phys. Cul., Art.	1921	5	1			1,300
Metcalfe, 11 Osgoode	White, Edna M.		Art		1921	4½		1,700		
	Grooms, Bernice.....(Int.)			Art	1921	1	½			1,300
Millbrook	Money, Mabel		Art.....(Int.)		1920	5½	5	2,000		
	Abbot, Florence			Phys. Cul.	1921	2½	2			1,300
Milverton	Carbert, Robert H.			Phys. Cul.	1919	13½	3	2,100		
	Mansz, Thusnelda M.			Art	1921	½	2			1,300
Mimico	Glenn, Everett H.			Phys. Cul.	1921	6	2	3,000		
	Wells, Dorothy		Art.....(Int.)	Phys. Cul.	1921	3	1			1,600
	Kennedy, Florence I...(Int.)			Phys. Cul.,	1921	1	1½			1,500
	Wright, Edna		Art.....(Int.)		1921	½	3			1,500
Minden, U. 1 Anson	McGahey, Mabel R....(Int.)				1922		2½	1,300		
Morriston, 8 Puslinch	Stewart, Margaret E.		Art		1921	5	8	1,200		
Mount Albert, 13 East Gwillimbury	McKenna, Jessie	B.A., Queen's	Eng. and Hist.	Phys. Cul.	1920	3½	2½	1,700		
	Waterman, Isobel M.			Art	1920	3½	1			1,400
Mount Brydges	Davidson, Georgia	B.A., West.		Art., Phys. Cul.	1918	7	4	1,800		
	Collins, Bertha V.			Phys. Cul.	1921	1½	2			1,300

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								Principal	Male Assistants	Female Assistants
								$	$	$
†Navan, 3 Northumberland	Quinlan, Lucie H.				1921	1	2	1,450		
New Hamburg	Bowden, Wm. L. ‡	B.A., Queen's		Phys. Cul., Agr.	1919	7½	12	1,950		
	Foster, Mary M.			Art	1920	2½	6			1,400
New Liskeard	Dobbie, Isabella E.			Agr., Farm Mech.	1911	13	18	2,000		
	Knowles, Anna V.		Art. (Int.)	Phys. Cul.	1921	3½	6			1,800
North Augusta, 17 Augusta	Gabriel, Mary			Art, Phys. Cul.	1921	3½	1	1,800		
	Fenton, Hazel S. (Int.)	B.A., Queen's			1921	½	2			1,200
North Gower, U. 6 North Gower	Aylsworth, Bessie C.			Phys. Cul.	1921	3½	3	1,800		
	Craig, Muriel M. (Int.)				1921	½	1			1,100
Odessa, 13 Ernestown	Milling, Edith G.	B.A., Queen's		Art	1921	½	5	1,600		
	Morrison, Rachel E. (Int.)				1921	½				1,250
Oil Springs	Lucas, Alex. B.				1921	½	4½	1,600		
	Robb, Reta E. (Int.)				1921	½	½			1,300
Orono, 12 Clarke	Buchanan, Luella M.			Phys. Cul.	1921	3½	2	1,800		
	Jervis, Cora (Int.)				1921	½				1,300
Paisley	Vasey, John B.		Phys. Cul. (Int.)		1920	2½	2	1,800		
	Brydon, Eleanor Hope.. (Int.)				1921	1½				1,200

Pakenham 4 Pakenham	White, Mabel R			Phys. Cul., Art	1918	10		1,750	
	Penfold, Bessie G			Art	1921	½	2		1,300
Palmerston	Anglin, Sara				1913	13½	10	2,000	
	Stuart, Janetta H			Art	1921	½	3		1,200
Plattsville, 24 Blenheim	Collins, James ‡	B.A., Tor	Art		1919	7½	3½	1,750	
	McCorquodale, Elizabeth			Phys. Cul	1920	1½	5		1,300
Port Burwell, 2 Bayham	Austin, Prudence M	B.A., Queen's	Art	Phys. Cul	1920	7½	3	1,600	
	Twiss, Countess L	B.A., McM	Class. (Int.), Art	Phys. Cul	1920	4½	1		1,250
Port Colborne	Dobson, Geo. C ‡	B.A., Tor	Phys. Cul		1921	3½	5	2,600	
	Stephens, Ella G				1921	4½	3		2,000
	(Teacher to be appointed)								
Port Credit	Doupe, Henry A			Art	1919	13½	2½	2,000	
	Leggott, Louie V		Phys. Cul. (Int.)		1920	1½	3		1,200
Powassan	Stewart, Cameron A. (Int.) **				1921	½	1½	1,500	
	Massey, Stella V. (Int.)				1921	½			1,300
†Princeton, U. 21, Blenheim	O'Brien, Catherine E			Phys. Cul	1921	1½	2	1,600	
Richmond	McGee, Florence			Art	1920	2½	2	1,500	
	Stirtan, Grace W. (Int.)			Art	1921	½	½		1,300
Ridgeway, 11 Bertie	Woodley, Arthur M			Agr	1913	14½	7	2,300	
	Houser, Evelyn G		Art	Phys. Cul	1917	4½	3		1,400
Ripley, 10 Huron	Martyn, Tena H		Phys. Cul., Art		1920	5½	1	1,800	
	Scott, Edith H. (Int.)	B.A., Tor			1921	½	1		1,400
Rockwood	James, Edna				1921		3	1,300	
Rodney	Reid, Emmett C			Art	1921	2½		1,800	
	Barclay, Jean A. (Int.)				1921	1½	1		1,300
Russell, 2 Russell	Morrow, Consuelo B	B.A., Queen's	Art. (Int.)	Phys. Cul	1921	3		1,800	
	Maitland, Jessie H	B.A., Queen's	Eng. & Hist. (Int.)	Phys. Cul	1917	5½			1,450

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								Principal	Male Assistants	Female Assistants
								$	$	$
St. George	Gilchrist, John ‡	B.A., Queen's		Agr.	1916	5½	4	2,400		
	Jenkins, Mrs. Mary ‡	M.A., Tor.	Fr. & Ger. (Int.)	Art	1920	11½				1,800
Schomberg, 14 King	Kaufman, Alvin J. (Int.)			Art	1921	1	11	1,400		
Scotland, U. 18 Burford and 3 Oakland	Turvey, Ina Merle		Art	Phys. Cul.	1919	7½		1,600		
	Foster, Helen E.			Agr., Farm Mech.	1920	1½	4			1,200
Sioux Lookout	Kendrick, William K. F. (Int.)				1921	½	2	1,900		
Southampton	Schooley, Fred T.			Phys. Cul.	1920	16½	6½	1,750		
	Worsell, Reta M. (Int.)				1920	1½				1,385
South Mountain, 1 Mountain	Hambly, George H. (Int.) **				1921	½		1,600		
	Glenn, Edna E.			Art	1921	½	3			1,200
South Porcupine, U. 1 A Tisdale	Knox, Mary E. (Int.)			Phys. Cul.	1920	2		1,600		
Spencerville, 15 Edwardsburg	McLean, Viola B. (Int.) **				1921	½		1,800		
	Nesbitt, Lela T. (Int.)				1921	½	4			1,500
Springfield	O'Brien, Wilfrid E.			Phys. Cul.	1921	3	½	1,800		
	Philpot, E. Viola				1921	½	2			1,300

Sprucedale	Card, Annie				1921	¼	16	1,500		
Stayner	Murday, Arthur M				1920	10½	8	2,000		
	Swallow, Margaret B		Art (Int.)	Phys. Cul	1917	4½				1,400
Stella	Salsbury, Nina O **	B.A., Queen's			1921	½	6	1,500		
	Machan, Susan LeRoy (Int.)				1921	½	½			1,300
Stouffville	Stouffer, Archibald		Phys. Cul (Int.)		1918	3½	2	1,900		
	McKinnon, Edna M (Int.)				1922	½	1			1,100
Sturgeon Falls	Wheeler, Harold A		Phys. Cul (Int.)	Farm Mech	1921	½	4	1,800		
	Hassard, Mary G		Phys. Cul (Int.)		1921	1½	2			1,400
Sunderland, 13 Brock	Wallace, Minnie G	B.A., Queen's		Art, Phys. Cul	1921	3½		1,800		
	Smith, Margaret A (Int.)			Art	1921	½				1,300
Sutton	Cook, Ida M			Art, Phys. Cul	1921	2½	2	1,700		
	Strong, Harriet E (Int.)			Art	1921	2½				1,400
Tamworth	Fletcher, Douglas R			Phys. Cul	1915	7	3½	2,000		
	Rose, Elsie J (Int.)			Art	1921	½				1,300
Tara	McGibbon, Hazel M			Art	1920	8	½	1,800		
	McIntyre, Archibald F				1921	½	2		1,500	
Tavistock	Bell, Jessie M	B.A., Tor	Mods. & Hist	Art, Phys. Cul	1916	11½	1½	1,500		
	Johnston, Jessie V (Int.)				1921	1	1			1,200
Teeswater	Thompson, Harry C				1912	9½	3	1,600		
	Hicks, Evalyn G			Art, Phys. Cul	1920	6½				1,275
Thamesford	Francis, Garnet C			Phys. Cul	1921	½	2	1,600		
Thamesville	Hicks, Frederick M			Phys. Cul	1920	16	2½	1,700		
	Gray, M.A., Verlie (Int.)			Art	1921	½	2			1,350
Thessalon	Woodcock, Mary S			Art, Phys. Cul	1921	2½	5	1,700		
	Start, Isabel S (Int.)			Art	1921	2½				1,500
Thornbury	Chisholm, Renwick J			Phys. Cul	1920	8½		2,100		
	Brown, Harry W (Int.)			Art	1920	1½			1,500	

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								Principal	Male Assistants	Female Assistants
								$	$	$
Thorndale, 8 W. Nissouri	Colhoun, Annie I.			Art	1921	½	2	1,600		
	Copeland, Bertha M. . . (Int.)			Phys. Cul	1920	1½	1½			1,200
Tilbury	Archer, Nerissa N.		Art. . . . . (Int.)		1921	4½	1	1,500		
	Arnold, Elizabeth M.			Art	1921	½	3			1,300
†Timmins	Carter, Chetwynd S.			Phys. Cul	1919	11½	1	2,500		
				Art, Phys. Cul	1920	1½	4			1,800
Tottenham	Campbell. Mabel. . . . . **									
	Coumans, Melinda M. . (Int.)			Phys. Cul	1920	6½	4	2,000		
	Campbell, Vera A (Mrs.)			Art	1920	2½				1,300
Walkerville	Meade, Robert	M.A., Queen's	Sci. . . . . (Int)		1921	½	32	3,000		
	Auld, Mary C.			Art	1921	½	11			2,000
	Towle, Lucie A.		Com. . . . . (Int.)	Art	1921	3	2½			2,000
Warkworth, 2 Percy	McTurk, Isabel. . . . . ‡	B.A., Queen's			1921	5½		1,700		
	Twomey, Mary			Art	1920	3½	3			1,350
Westboro', 2 Nepean	Stewart, Annie J. . . . . ‡	B.A., Queen's		Phys. Cul	1919	11½	1½	2,200		
	MacNeil, Lena L.			Art	1919	4	½			1,600
	Cross, Dora Edith . . . . (Int.)	B.A., Queen's			1921	1	½			1,300
	Ranson, Bertha M.		Phys. Cul		1921	6	2			1,600
West Lorne	McMahon, Frank O. . . . . ‡	B.A., Tor.		Phys. Cul	1921	13½	6	1,800		
	Adams, Edith I.			Phys. Cul	1921	4½	1			1,300

Westmeath, 2 Westmeath	Fraser, Nancy H. (Int.)			Art	1920	1½	1	1,300		
†Westport	Knapp, Gertrude			Art	1920	7½	3	1,450		
†Westport (R. C. S. Sch.)	McDonell, Margaret. (Sr. St. Clare)	B.A., Queen's		Art	1919	2½	3	1,100		
Wheatley	McCoig, Mary Alice			Art, Phys. Cul	1921	6	3½	1,742		
	Parson, Dorothy F. M. (Int.)				1921	1½	½			1,200
Winona, 1 Saltfleet	Harris, Emarilla B. (Int.)			Art, Phys. Cul	1920	2½	2	1,500		
Wroxeter	Burchill, Mrs. Jean S.			Phys. Cul	1919	16½	10	1,400		
	Sanderson, Elizabeth M.			Art, Phys. Cul	1918	3½	2			1,300

**Temporary certificate as Principal. ‡ High School Principal's certificate. † One Teacher devotes full time and one, half time to Continuation School work.

SUMMARY, CONTINUATION SCHOOLS, JANUARY, 1922

Number of Schools
Sex and Number of Teachers
and Percentages

Schools:

Four-teacher Schools	2
Three-teacher Schools	10
Two-teacher Schools	102
*One-teacher Schools	46
Total Number of Schools	160
Increase for the year	16

Teachers:

Men	72
Women	214
Total Number of Teachers	286
Increase for the year	31

Percentages:

January, 1922:	Men, 25.17;	Women, 74.82
" 1921:	" 27.84;	" 72.15
" 1920:	" 25.81;	" 74.18
" 1919:	" 27.77;	" 72.22
" 1914:	" 31.65;	" 68.34
" 1912:	" 39.44;	" 60.55

Salaries

Highest Salary, Principals	$3,000
" " Male Assistants	1,800
" " Female Assistants	2,400
Average Salary, Principals	1,742
Increase for the year	163
Average Salary of Assistants	1,383
Increase for the year	154
Average Salary, all Teachers	1,583
Increase for the year	159
Average Salary, Male Assistants	1,519
Increase for the year	163
Average Salary, Female Assistants	1,374
Increase for the year	159

University Graduates,
Specialists, etc.

Graduates	40
Non-graduates	246
Percentage of Graduates, Jan., 1922	13.98
" " " 1921	18.43
Percentage of Non-Graduates, Jan., 1922	86.01
" " " 1921	81.56
Specialists, Jan., 1922	21
Interim Specialists, Jan., 1922	38
Percentage of Specialists and Interim Specialists, Jan., 1922	20.62
Percentage of Specialists and Interim Specialists, Jan., 1921	22.35
Elementary Certificates in Art	96
" " Physical Culture	108
" " Farm Mechanics	3
" Certificate in Vocal Music	1
Intermediate Certificates in Agriculture and Horticulture	11
Teachers holding Elementary or Intermediate Certificates, Jan., 1922	179
Increase for the year	13

*Eleven of these schools have in addition one teacher who devotes at least half time to Continuation School work.

III. List of Principals and Assistants of Collegiate Institutes and High Schools, January, 1922

Collegiate Institutes	Names of Teachers	Degrees	Specialists	Elementary and Intermediate Certificates (In the case of Agr. and Hor. the Certificate is Intermediate)	Date of appointment	No. of years' experience in a High School or Coll. Inst.	No. of years in a Public School	Salaries		
								Principal	Male Assistants	Female Assistants
								$	$	$
Barrie	Girdwood, Arthur R	B.A., McM	Math	Phys. Cul	1919	18	....	3,000	.....	.....
	Dewar, Nora G	B.A., Queen's	Class	Art	1920	6½	....	.....	.....	1,850
	Ramage, George E	B.A., McM	Phys. Cul., Sci	.....	1921	5½	....	.....	2,500	.....
	Houghton, Charles W. . (Int.)	B.A., Queen's	Phys. Cul	.....	1921	½	....	.....	1,800	.....
	McCallum, Mary A	B.A., Queen's	Eng. & Hist., Phys. Cul	.....	1920	6½	2½	.....	.....	1,850
	Henry, Esther A	B.A., Tor	Art	.....	1920	4½	4½	.....	.....	1,700
	Guthrie, Ethel R	B.A., Queen's	Mods. and Hist., Phys. Cul	.....	1920	5½	....	.....	.....	1,850
	MacDougall, Florence E	B.A., Queen's	Art	.....	1921	2½	....	.....	.....	1,700
	Pirie, Elizabeth B	.....	Com	Phys. Cul	1920	5½	1	.....	.....	1,850
Brantford	Overholt, Arthur M	M.A., McM	Math	.....	1918	20½	½	3,500	.....	.....
	Burt, Arthur W	B.A., Tor	Mods. and Eng	.....	1893	43	....	.....	2,600	.....
	Coates, Daniel H	B.A., Tor	Math	.....	1893	34	....	.....	2,475	.....
	Passmore, Samuel F	M.A., Tor	Class	.....	1885	40	....	.....	2,475	.....
	Bunnell, Effie M	B.A., Tor	Eng., Fr. and Ger	.....	1891	30	....	.....	.....	2,475
	Erwin, Willis M	B.A., Queen's	Agr. (Int.), Science	Agr., F. M.	1918	5½	....	.....	2,475	.....
	Hately, Enid Mary	B.A., Tor	.....	Phys. Cul	1918	3½	....	.....	.....	1,800
	Graham, Herbert W. . . . (Int.)	B.A., Queen's	Phys. Cul	.....	1921	5	½	.....	2,100	.....
	Macleman, C. Lillie	B.A., Queen's	Phys. Cul. . . . . (Int.)	.....	1921	11½	1	.....	.....	1,800
	Patterson, Harriet A	B.A., Queen's	Eng. and Hist. . . . . (Int.)	.....	1921	15	....	.....	.....	2,400
	Unger, Delbert B	B.A., Tor	Phys. Cul	.....	1921	4	2	.....	2,100	.....
	McFadden, Robt. W. E	B.A., Tor	.....	.....	1916	6½	½	.....	2,175	.....
	Kerr, Mrs. Winnabel E	B.A., McM	Art	.....	1921	8½	5	.....	.....	1,800
	Millar, Frederick G	B.A., Tor	Com. . . . . (Int.)	Phys. Cul	1919	18	....	.....	2,475	.....
	Hanna, Lorna	B.A., Tor	Eng. & Hist., Phys. Cul	.....	1917	5	....	.....	.....	1,800
	McCamus, William R	B.A., Tor	Phys. Cul. (Int.), Class	.....	1921	5	....	.....	2,475	.....
	Ryan, Gertrude	.....	.....	.....	1912	12	....	.....	.....	1,800
	Shultis, Adam	.....	Com	.....	1896	25	11	.....	2,475	.....

List of Principals and Assistants of Collegiate Institutes and High Schools, January, 1922 (Continued)

Collegiate Institutes	Names of Teachers	Degrees	Specialists	Elementary and Intermediate Certificates (In the case of Agr. and Hor. the Certificate is Intermediate.)	Date of appointment	No. of years' experience in a High School or Coll. Inst.	No. of years in a Public School	Salaries		
								Principal	Male Assistants	Female Assistants
								$	$	$
Brantford–*Con.*	Barber, Etta L.				1921	9½	5½			1,800
	Willoughby, Annie J.		Phys. Cul. (Int.)		1917	11½	5			1,800
	Gregory, Stella L.				1921	14½	2			1,800
	McAllister, Annie G.		Phys. Cul.		1917	14	1½			1,800
	Dixon, Nora G.		Com.	Phys. Cul., Art.	1915	6½	2			1,800
	Hartley, Edna E.		(Ho. Sci. Instr.)		1918	7½	4			1,800
	Coles, James C. (Int.)		(Man. Train. Instr.)		1921	½	1		2,200	
Brockville	Husband, Almeron J*	B.A., Tor.	Eng. & Hist., Fr. & Ger.		1895	26	3	3,200		
	Thompson, Alva E.	B.A., Queen's	Math. and Phys.		1919	5			2,400	
	Butcher, Frank H.	B.A., Tor.	Class	Phys. Cul.	1920	5½			2,300	
	Anderson, John A.	B.A., Queen's	Science (Int.)	Agr., Farm M.	1920	6½	4		2,300	
	Learoyd, Clarence W.	B.A., Tor.	Phys. Cul.	Agr., Farm M.	1921	3	3		2,200	
	Giles, A. Edith		Art.		1890	32	3			1,900
	Smith, Margaret		Com.	Art.	1920	27	3			1,650
	Roberts, Mabel E.	B.A., Queen's	Art.		1920	5½	3			1,550
	Lewis, Marjorie B.	B.A., Queen's	Phys. Cul. (Int.)		1920	2½				1,550
	Brown, Marion H. (Int)	B.A., Queen's		Phys. Cul.	1921	1½				1,500
Chatham	Twohey, William J.	M.A., Tor.	Class		1904	37		3,300		
	Sexsmith, William N.	B.A., Tor.	Eng. and Hist.		1907	17½	3		2,600	
	Houston, Jessie	B.A., Tor.	Mods. and Hist.		1913	17½				2,300
	Asselstine, Oliver	M.A., Queen's	Math.		1915	14½			2,600	
	Challinor, John L.		Phys. Cul.		1919	8			2,200	
	Kirk, Gladys R.		Phys. Cul. (Int.), Art.		1917	7½	1			2,100
	Haydon, William J.	M.A., McM.	Science	Phys. Cul.	1917	10½			2,600	
	Brimicombe, Bessie F.		Com.	Art, Phys. Cul.	1918	9	3			2,100
	Ord, Annie Lillian		Phys. Cul.		1921	3	6			1,900
	Traver, Lillie A.	B.A., Queen's	Eng. and Hist.	Phys. Cul.	1922	5½	3½			2,150

	Campbell, Stella K.		Phys. Cul		1921	14½	1½			2,100
	Pilky, Helene M. B		(Ho. Sci. Instr.)		1921	½	10			1,500
	DeGroat, Charles M		Man. Train (Int.)		1921	4½	6		1,900	
Clinton	Treleaven, John W.	B.A., Tor.	Class	Phys. Cul	1907	30		2,500		
	Macdougall, Isabella J.	B.A., Tor.	Eng. & Hist., Fr. & Ger		1910	15½	3			1,900
	Summerhays, Robert V. (Int.)	B.A., Tor.	Sci	Agr., Phys. Cul.	1921	½			2,200	
	Sinclair, Alexander (Int.)	M.A., Tor	Math. & Phys., Phys. Cul.		1921	½			2,200	
	Ellis, Roxie A.		Art		1921	8½	1			1,800
	Mew, Mrs. Edna F.			Art, Phys. Cul.	1922	7½	4			1,800
Cobourg	Arthur, Colin C.	M.A., Queen's	Science		1893	30	1	2,700		
	Jones, Laura L.	B.A., Tor.	Eng., Fr. and Ger		1898	28½				1,900
	Davidson, Robert D. P.	B.A., Queen's	Science	P.C.,Agr., F. M.	1916	6½	4		2,100	
	Hickey, Philippa A. V.		Phys. Cul		1916	9½	5			1,500
	Elcoat, Hazel I.		Com., Art	Phys. Cul.	1916	6	1½			2,000
	Schultz, Marvin L. (Int.)	B.A., Tor.	Phys. Cul		1920	2			2,000	
	Humphries, Wilma M.	B.A., Queen's	Math. and Phys		1921	7½				2,000
	Fletcher, Beatrice L.	B.A., Tor.	Class	Phys. Cul.	1921	11½	2½			1,900
	Boggs, Grace		(Ho. Sci. Instr.)		1917	4½	7½			800
Collingwood	Willoughby, Henry A. G.	M.A., Tor	Science		1919	4½	5½	3,100		
	Helmkay, Dora L.	B.A., Queen's	Phys, Cul. (Int.), Math.		1922	2½				2,000
	Ball, Emerson E	B.A., Tor.	Mods. and Hist.		1919	14½			2,700	
	Hind, Edith J	B.A., Queen's	Com		1919	13	3½			2,000
	Sinclair, Margaret		Art	Phys. Cul.	1919	5½	13			1,700
	Ashdown, Charles R. (Int.)	B.A., McGill	Phys. Cul		1921	1			2,300	
	Stevens, Myrtle H	B.A., Tor.		Phys. Cul.	1921	6½	1			2,000
	Ellis, Victor A.		Man. Train (Int.)		1921	2½	6		1,900	
	Douglas, M. Leona (Int.)		(Ho. Sci. Instr.)		1920	1½	2			1,200
Fort William	Wood, Elmore E.	M.A., McM	Phys. Cul., Math	Farm Mech.	1912	18½	2	3,800		
	Parlee, Edith		Art, Com		1908	27	10			3,000
	Cornell, Maurice L.	M.A., Queen's	Math		1910	14½			3,000	
	Ogilvie, Alvin I.	B.A., McM	Mods. & H.(Int.), Eng. & H		1914	12½			3,000	
	Breslove, David	M.A., Tor.	Class	Phys. Cul.	1919	4½			2,800	
	MacLaurin, James L.	M.A., McM	Sci	Phys. Cul., Agr.	1918	10			2,800	
	Fritz, Olive E.		Com		1919	11				2,400
	Knight, Florence I.	B.A., Tor.	Art (Int.), Phys. Cul.		1921	4½				1,800
	Clendinnen, Margaret E (Int.)	B.A., Queen's			1921	1½				1,800
	Clothier, James O.	B.A., Queen's	Fr. and Ger		1921	23½			2,900	
	Garner, John H. (Int.)			Agr.	1921	½	28		2,650	

*Qualified to teach Spanish.

List of Principals and Assistants of Collegiate Institutes and High Schools, January, 1922 (Continued)

Collegiate Institutes	Names of Teachers	Degrees	Specialists	Elementary and Intermediate Certificates (In the case of Agr. and Hor. the Certificate is Intermediate.)	Date of appointment	No. of years' experience in a High School or Coll. Inst.	No. of years in a Public School	Salaries		
								Principal	Male Assistants	Female Assistants
								$	$	$
Fort William—*Continued*	Boland, Eva G. (Int.)				1921	1½	2½			1,800
	Clothier, Bessie		Art	Phys. Cul.	1922	7½	2			2,000
	Trynor, Mrs. Pearl (Int.)	M.Sc., Florida	(Ho. Sci. Instr.)		1921	½	1½			1,500
	Pengelley, Isaac B		Man. Train		1922		9		1,800	
Galt	Gundry, Arthur P	B.A., Tor	Science	Agr., Farm M.	1914	30½		3,400		
	Carscadden, Thomas	M.A., Tor	Eng. and Hist		1881	46	3		2,500	
	Hamilton, Robert S	M.A., Tor	Science	Agr.	1894	32			2,500	
	Carter, Janet W	M.A., Tor	Eng. & H.(Int.), Fr. & Ger.		1901	29				2,500
	Challen, Newton E	B.A., McM	Math., Phys, Cul		1920	10½	3		2,500	
	Ewing, Charles M	M.A., Edin	Class (Int.)	Phys. Cul.	1921	3½			2,500	
	Medcof, William T. (Int.)	M.A., Queen's	Eng. and Hist.	Phys. Cul.	1921	½	8		2,200	
	Fraser, Lulu B		Phys. Cul. (Int.), Art		1916	9½	2½			1,900
	Weatherill, Helen E. M		Com., Art	Phys. Cul.	1918	10½	1			2,000
	McKee, William C. (Int.)		Phys. Cul		1919	2½	5½		1,900	
	Hinchley, John M. (Int.)		Phys. Cul		1920	1½	5½		1,900	
	Harding, Mary J	B.A., Tor	Phys. Cul. (Int.)		1919	4	½			1,900
	Quinn, Mamie Gladys		Phys. Cul. (Int.), Com., Art		1920	5	1½			1,900
	Chalmers, C. Maude	B.A., Queen's	Mods. and Hist. (Int.)	Phys. Cul.	1921	1½	2			1,800
	Phelan, Frank J		Man. Train	Phys. Cul.	1916	7½	5		2,000	
	Baillie, Grace S. T. (Int.)	B. A., Tor	Ho. Sci, Phys. Cul		1920	2½				1,900
	Dykes, Vera K		Phys. Cul		1922	3½	2			1,600
Goderich	Hume, John P	B.A., Queen's	Science	Agr.	1911	30		2,500		
	Robertson, Alexander M	M.A., Queen's	Math., Fr. and Ger.	Phys. Cul.	1908	26½	3		2,000	
	Trenaman, Mabel N	B.A., Tor	Mods. and Hist., Phys. Cul.		1921	18½				2,000
	Penfold, Janet L	M.A., Tor	Class		1921	6				2,000

	Hodge, Gertrude Agnes	B.A., Tor.	Phys. Cul. (Int.)		1909	13	1			1,700
	Burns, Olive May	B.A., Queen's	Art. (Int.)		1921	6½	2			1,800
	Brill, Minnie L.		Art (Int.), Com	Phys. Cul.	1921	6	4½			1,800
Guelph	Davison, James	B.A., Vic.	Math		1892	47	2	3,000		
	Charlesworth, John W.	B.A., Queen's			1915	31	3½		2,500	
	Leckie, Bruce E.	B.A., McM.	Sci.	Phys. Cul.	1921	11½	2		2,500	
	Skinner, Kate C.	B.A., Tor.	Eng., Hist., Fr. and Ger.		1895	27	1			2,100
	Urquhart, Mrs. Ethel K.	B.A., Tor.	Class.		1919	14½				2,100
	Blyth, Sara		Com.		1910	16½	7			1,900
	Humphries, B. Rowena		Art.		1913	12	3			1,700
	Macdonald, John A. (Int.)	B.S.A., Tor.			1921	½	12		2,000	
	Cameron, James		Phys. Cul.		1921	7½	1		2,000	
	Dixon, Fred W.			Art, Phys. Cul.	1921	4½			2,000	
	Henry, Reta I. (Int.)				1921	½	5			1,600
	Fyckes, Jessie D. (Int.)	B.A., Queen's	Mods. & Hist., Phys. Cul.		1921	1½	2			2,000
	Pigott, Margaret			Phys. Cul., Agr.	1920	3½	8			1,400
	Millar, Gertrude, E. (Int.)	B.A., Tor.	Phys. Cul.		1921	2½	2			1,800
Hamilton	Turner, John B.	B.A., LL.D., Queen's	Math., Sci.		1885	40	3	3,900		
	Hogarth, Eber S.	B.A., Tor.	Eng., Fr. and Ger.		1892	33			3,500	
	Simpson, Benjamin L.	M.A., Queen's	Math.		1905	16½	3		3,300	
	Morrison, Edward	B.A., Tor.	Science, Math.		1907	15½	6		3,300	
	McGarvin, Michael J.	B.A., Tor.	Mods. and Hist.		1919	13	2		3,300	
	Johnston, George L.	B.A., Queen's	Art, Com.		1888	34	3		2,950	
	Freeman, John A.	B.A., Tor.	Class.		1909	33			2,850	
	Armstrong, George F.	B.A., Tor.	Math.		1907	19½	1½		2,950	
	Price, Charles F.	B.A., Tor. & West	Eng. and Hist.		1913	11	8		2,700	
	Pugh, Harry C.	B.A., Tor.	Science.		1915	7½	2½		2,450	
	Sheppard, Alton M.	B.A., Tor.	Math.		1911	13	2½		2,750	
	Clarke, Walter	B.A., McM.	Class.		1919	6½			2,500	
	McGee, Cyril H.	B.A., Trin.	Math.		1909	25			2,850	
	McCrimmon, Leon R.	M.A., McM.	Science.		1919	7½			2,300	
	Foucar, Walter K.	M.A., Tor.	Eng. & Hist., Fr. and Ger.		1914	26½			2,650	
	Marshall, Charles F.	B.A., Tor.	Science.		1909	14½			2,850	
	Edwards, John J.	B.A., Queen's	Fr. and Ger.		1919	11	6		2,700	
	Collins, Herbert E.	B.A., Tor.	Mods. and Hist.		1911	15½			2,850	
	Beck, Clinton G.	B.A., Queen's	M. & H., E. & H., F. & G.		1914	8½	½		2,550	
	Ettinger, Karl F. (Int.)	B.A., Queen's		Phys. Cul.	1920	1½			2,100	
	Devitt, S. Girvin	B.A., Tor.			1915	7½	2		2,400	
	Teeter, Clarence G. (Int.)	B.A., McM.	Science.	Phys. Cul.	1920	1½			2,100	
	Elliott, Henry E.	B.A., Queen's			1919	13½	3		2,300	

List of Principals and Assistants of Collegiate Institutes and High Schools, January, 1922 (Continued)

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								Principal	Male Assistants	Female Assistants
								$	$	$
Hamilton	Gordon, James I.	B.A., Tor.	Phys. Cul. (Int.)		1918	3½	3½		2,300	
	Daniels, Percy (Int.)	B.A., Tor.	Phys. Cul.		1921	1½			2,100	
	Pyke, Edgar W. (Int.)	B.A., McM.	Class., Phys. Cul.		1921	1½			2,500	
	Lishman, Fred R.	B.A., Queen's	Phys. Cul. (Int.)	Art.	1921	9½			2,300	
	Edwards, Mabel C.		Phys. Cul.		1908	15½				1,700
	Hill, Mary A.		Art.		1909	20	4			1,700
	Van Duzer, Mabel L.	B.A., Tor.	Art.		1921	9				2,000
	Taylor, Frederick		(Man. Train. Instr.)		1918	9	3		2,100	
	Mitchell, Lola K. (Int.)	B.A., Tor.	Ho. Sci.	Phys. Cul.	1920	1½				1,700
	Lean, A. R., (Temp.)	B.A., Cambridge			1922				2,200	
	Cornelius, John R. *		Phys. Cul. (Int.)		1919	2½			2,300	
Ingersoll	McGill, David H.	M.A., Queen's	Science	Agr.	1921	10	3½	2,900		
	Martin, Jean E.	B.A., Tor.	Math. and Phys.	Phys. Cul.	1918	5½				1,900
	Clark, Olive L.	M.A., McM.	Class.	Phys. Cul.	1919	2½				1,800
	Hudson, Annie L.		Com., Art	Phys. Cul.	1917	8½	12½			1,800
	Garrow, Ada M. (Int.)	B.A., Tor.	Eng. and Hist.	Phys. Cul.	1921	1½				1,500
	Coyne, George A. (Int.)	B.A., Tor.	Phys. Cul.		1921	1	3		1,800	
	Kendall, Sybel M.	B.A., Tor.	Ho. Sci.	Phys. Cul.	1918	3½	3			1,350
	Weir, Norman L. (Teacher to be appointed)		(Man. Train. Instr.)		1919	2½	3½		1,600	
Kingston	Sliter, Ernest O.	M.A., Tor.	Class.		1888	34		3,700		
	Otto, George S.	B.A., Queen's	Phys. Cul., Mods. and Hist.		1917	7½	3		2,600	
	Saunders, William J.	M.A., Qn's., M.S., Chi.	Science		1908	21½	3		2,600	
	Shurtleff, William M.	B.A., Queen's	Art, Com.		1913	12½	8		2,600	
	Chown, Hattie L.				1905	17	20			1,750
	Fraser, James W.	B.A., Tor.	Eng. and Hist. (Int.)		1904	18½	10		2,550	

	Hedley, William P	B.A., Tor	Math		1908	17½	8		2,550	
	Henstridge, Elizabeth	M.A., Queen's	Fr. and Ger., Eng. and Hist.		1907	20½	7			2,150
	Hitsman, Samuel A	B.A., Queen's	Com.		1916	7½	20		2,350	
	Kelly, James W	B.A., Queen's			1912	9½	15		2,350	
	McCormack, Mary Irene	B.A., Queen's	Phys. Cul. (Int.)		1919	14				1,950
	Shaver, Charles A	B.A., Queen's	Class.	Phys. Cul	1919	12½	4½		2,350	
	Stock, Dora H	M.A., Queen's	Mods. and Hist.	Phys. Cul	1919	3½				2,150
	Strader, James W. (Int.)	B.A., Queen's		Phys. Cul	1920	1½	2		2,100	
	McLeod, Lola	B.A., Queen's	Phys. Cul. (Int.)		1922	8				1,700
	Whitton, Lillis Pearl	B.A., Queen's	Fr. & Ger., Mods. & Hist.		1921	5½				2,150
	Edwards, Rebecca		Art, Phys. Cul. (Int.)		1921	12½				1,750
	Fair, Marjorie W. (Int.)	B.A., Queen's	Phys. Cul.		1921	½	9			1,500
	Law, H. E		(Drill Instr.)		1920				1,500	
Kitchener-Waterloo	Merritt, Robert, N	B.A., Tor	Math		1921	22	1½	3,900		
	Forsyth, David	B.A., Tor	Math		1901	44½	1		3,000	
	Brown, Harry W	B.A., Queen's	Art		1905	19½	17		2,800	
	Pugsley, Edmund	B.A., Vic	Science	Agr	1909	31			2,600	
	Kerr, Charles S	B.A., Tor	Class., Eng. and Hist.		1911	34			2,600	
	Erb, Maurice	B.A., Queen's	Eng. and Hist.		1917	5½	5		2,600	
	Moran, Harry F. (Int.)		Phys. Cul.		1921	1½	1½		2,000	
	Hubbs, Mary W	B.A., Queen's	Fr. and Ger.	Phys. Cul	1919	6½				2,000
	Mallory, Bertha		Phys. Cul., Com.	Art	1913	14½	10			1,800
	Gillies, Ina M	B.A., Tor	Phys. Cul. (Int.)		1921	3½	1½			2,000
	Tuck, Ella M	B.A., Tor	Art (Int.), Phys. Cul		1921	3½				2,000
	Burton, Olive W. (Int.)	B.A., Tor	Art, Ho. Sci.		1921	1½	2			1,700
	Pengelley, Olympus R		Manual Training		1919	7	5		2,100	
Lindsay	Kirkconnell, Thomas A	B.A., Qn's, L.L.D., Tor.	Math		1908	36	3	3,375		
	Jennings, Edwin Wm	B.A., Tor	Eng. and Hist.		1909	19	4		2,500	
	Firth, Thomas	M.A., Tor	Science	Agr	1912	11½	2½		2,500	
	Hambly, Philo K	B.A., McM	Class.		1918	4½			2,500	
	Johnson, Alfred	B.A., Queen's	Phys. Cul. (Int.)		1916	5½			2,375	
	Lucas, Gavin A	B.A., Tor	Com.	Art	1910	19	6		2,500	
	Montgomery, Mayme I	B.A., McM	Art, Fr. and Ger.		1917	8½				2,250
	Corkery, Florence	M.A., Queen's	Art, Eng. and Hist.		1919	14	3			1,750
	Moir, Catherine E				1908	27½	4			1,750
	Shook, Muriel A		Art, Phys. Cul.	Agr	1918	9½				1,750
	Nugent, G. Vivien. (Int.)				1921	½				1,700

*Qualified for Physical Culture only.

List of Principals and Assistants of Collegiate Institutes and High Schools, January, 1922 (Continued)

Collegiate Institutes	Names of Teachers	Degrees	Specialists	Elementary and Intermediate Certificates (In the case of Agr. and Hor. the Certificate is Intermediate.)	Date of appointment	No. of years' experience in High School or Coll. Inst.	No. of years in a Public School	Salaries		
								Principal	Male Assistants	Female Assistants
								$	$	$
London	Mooney, Wm. H. T	B.A., Tor	Class		1903	19½	6	4,000		
	MacDonald, George L	B.A., Tor	Eng., Fr. and Ger		1908	29	7		2,900	
	Gray, Neil R	B.A., Tor	Mods. and Hist		1904	18½	3		2,900	
	Calvert, Joseph F	M.A., McM	Science	Agr	1909	17	1½		2,900	
	Martin, Stephen	B.A., Tor	Math		1912	35	3½		2,900	
	McNeil, William G	B.A., Queen's	Eng. and Hist		1918	6½	3½		2,900	
	Miller, Everton A	M.A., McM	Class		1918	9½	3		2,900	
	Blake, Richard J		Com		1915	13½	2		2,800	
	Dolan, John H	B.A., Queen's	Class		1920	23½			2,800	
	Cameron, John H				1911	23	9		2,800	
	Brown, Duncan	M.A., Queen's	Science (Int.)		1920	5½	4½		2,800	
	Goldstick, Isidore	M.A., Tor	Mods. and Hist		1917	4½			2,800	
	Urlin, William R	B.A., Queen's	Math	Phys. Cul	1919	4½	1½		2,800	
	Bluett, Claude K	B.A., Queen's			1912	9½	14		2,700	
	Adams, William A		Man. Train		1917	12	20		2,700	
	Buck, Charles S		Art, Phys. Cul		1919	7½	1½		2,500	
	Macpherson, Mary C	B.A., Queen's	(Ho. Sci. Instr.)		1908	19				2,400
	Kelso, Alice C				1897	26½	2½			2,400
	Winnett, Violet E	B.A., Western			1912	9½	23			2,400
	McCamus, Bessie	B.A., Tor	Eng. and Hist., Art		1913	12				2,400
	Menhennick, Ada M	B.A., McM	Mods., and Hist		1914	9½	3½			2,400
	Syme, John J.*		Phys. Cul		1916	16½			2,300	
	Tanton, Francis		Phys. Cul. (Int.), Man. T		1920	14½	7		2,000	
	McCann, Dorothy			Phys. Cul	1919	2½	2			2,200
	Hofferd, Mrs. Florence V	B.A., Tor	Mods. and Hist		1920	5½				1,900
	Carr-Harris, Mrs. Marion	B.A., Queen's			1920	2½				1,900
	Jackson, Katherine M	B.A., Tor	Phys. Cul., Mods. and Hist		1920	12				2,000

	Skelton, Minnie M.....(Int.)	B.A., West	Art		1920	1½	30			1,900
	Buchanan, Winnifred I	M.A., Queen's	Classics.....(Int.)		1921	7½	2½			1,900
	Davidson, S. Kelso		(Art Instructor)		1887	41			1,200	
	Morden, Gilbert W.....**	M.A., Qn's., Ph.D., Penn.	Sci		1922	14½			2,700	
	Taylor, May M	B.A., Queen's	Eng. and Hist.....(Int.)	Phys. Cul	1922	5	5			2,000
	Vrooman, Agnes S	M.A., West	Eng. and Hist.....(Int.)		1922	8½				2,000
	Holland, Edna M.....(Int.)	B.A., West	Phys. Cul		1921		2			2,000
Morrisburg	Boyd, Annie A	M.A., Queen's	Com., Science		1907	17½	8	2,600		
	Baird, Mabel M	B.A., Tor	Mods. and Hist		1919	12½				1,900
	Fowler, E. Isabel.....(Int.)	B.A., Tor	Class., Phys. Cul		1921	2½				1,700
	Cameron, Myrtle W. L. (Int.) (Teacher to be appointed.)	B.A., Queen's	Art		1921	½	½			1,900
Napanee	Maclean, Godwin V	M.A., Tor	Math		1913	29	1½	2,500		
	Baker, Sarah J		Com	Phys. Cul	1914	16½	2½			1,800
	Ross, Frances C	B.A., Tor	Class., Phys. Cul		1919	2½				1,800
	O'Reilly, B. Teresa	B.A., Tor	Mods. & H., Phys. Cul		1920	4				1,800
	Gillard, Leah A		Art		1920	8	1			1,800
	Fielding, Ewart L	B.A., Tor	Phys. Cul		1921	1½			2,000	
	Rutherford, Mary H	B.A., Queen's	Sci.....(Int.)		1921	9½				2,200
	McLean, M. Regina....(Int.)	B.A., Queen's		Phys. Cul	1921	½				1,500
Niagara Falls	Dickson, James D	B.A., Tor	Math		1893	34	3	3,200		
	Will, George E	B.A., Tor	Class		1901	21½	3		2,600	
	Bielby, George H	B.A., Tor	Science		1913	14½	7		2,600	
	Howson, Alexandra A	B.A., Queen's	M. & H. (Int.), F.&G., Ph.C		1916	12	2			2,300
	Whitelock, Stanley G	B.A., Tor	Phys. Cul.....(Int.)		1918	3½	3		2,300	
	VanAlstyne, Susan A	B.A., Tor	Math		1918	9	3⅛			2,300
	Herington, Bertha C	B.A., Tor	Phys. Cul. (Int.), M. & H		1921	4½	½			2,100
	McLean, Lea Nora		Art.....(Int.)	Phys. Cul	1921	2½	2½			1,800
	Mitchell, Janet A	B.A., Tor	Phys. Cul. (Int.), Ho. Sci		1919	2½	6			1,900
	Vandersluys, Col. C. H*		Phys. Cul							
North Bay	Wallace, Frank D	M.A., Queen's	Math		1913	11½		2,750		
	Whyte, Marion I	B.A., Tor	Mods. and Hist	Phys. Cul	1920	12	1			1,900
	Sinclair, Ella A	B.A., Tor	Class	Phys. Cul	1921	3½				1,900
	Scott, Jessie M			Phys. Cul	1920	10½	2½			1,800
	Dickson, Marion C	B.A., Queen's	Art, Com.....Int.)	Phys. Cul	1921	4½	3½			1,900
	McEown, Ruth	B.A., McM	Art.....(Int.)	Phys. Cul	1921	3				1,800
	Warren, Violet	B.A., Queen's	Eng. and Hist	Art	1922	2½	5½			1,900

* Qualified for Physical Culture only. ** Also holds degree of Doctor, Karlsruhe.

List of Principals and Assistants of Collegiate Institutes and High Schools, January, 1922 (Continued)

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								Principal	Male Assistants	Female Assistants
								$	$	$
North Bay—*Continued.*	Appleyard, Edith M	B.A., West	Phys. Cul. (Int.)		1922	1				1,700
	Smith, Donald G			Phys. Cul	1922	4	3½		2,600	
	Hartford, Leo				1922	6	½		2,200	
Orillia	Lillie, John T	B.A., Vic	Class		1910	34½		3,000		
	Robb, George W	B.A., McM	Ph. Cul. (Int.), Math. & Ph.		1920	4½	1½		2,100	
	Watterworth, Grace M		Com		1914	20½	2			2,100
	Lees, Margaret A	B.A, Queen's	Ph. Cl. (Int), Mods. & H		1920	4½	4			1,800
	Hamilton, Agnes I		Art	Phys. Cul	1919	8½				1,700
	Smith, James C. (Int.)			Phys. Cul	1921	2	1/3		2,000	
	Cruikshank, Norma L. (Int.)	B.A., McGill	Phys. Cul		1921	½				1,700
	Foster, Laura A. (Int.)	B.A., West	Phys. Cul		1922	1	4/5			1,800
	McKerroll, Mrs. Charlotte A	B.A., McM	Com. (Int.), Sci		1922	10½	1			2,200
Ottawa	McDougall, Alex. H	B.A., Tor., LL.D., Qn's.	Math		1889	36½		4,500		
	Norris, Isaac T	B.A., Queen's	Math		1898	26			3,400	
	Stothers, Robert	B.A., Queen's			1887	35	8		3,400	
	Gilchrist, Dugald A	B.A., B.Pæd., Tor	Eng. and Hist		1912	16½	7		3,400	
	Smeaton, William	B.A., Tor	Science		1906	21½	1½		3,300	
	Muir, Jessie	M.A., Queen's	Fr. and Ger		1909	12½	8			3,100
	Hood, Finlay	B.A., Queen's	Com. (Int.), Art		1906	17	7		3,400	
	Tomkins, Elizabeth A				1902	19½	19			2,800
	Mann, Harry Clarke	B.A., McM			1907	14½	6		3,100	
	Graham, William A	B.A., Tor			1908	23½	3		3,100	
	Kaiser, Jesse B				1909	28	4		3,100	
	Maybee, George E	B.A., Tor	Class., Fr. and Ger		1910	28½			3,200	
	Stewart, George B	B.A., Queen's	Math		1911	13½	2		3,100	
	Smith, Henry Lloyd		Com		1912	12	6½		3,200	

	Latour, Charles A	B.A., B.L., Laval			1914	7½	1		2,600	
	Stuart, Frederick A	M.A., Tor	Science		1915	26			3,100	
	MacMinn, Marie	B.A., Queen's	M. & H., P.C. (Int.), E. & H		1915	6½				2,300
	Gilhooly, Beatrice C	B.A., Queen's	Eng. and Hist		1915	6½				2,400
	Hills, Minnie B	B.A., Tor	Math		1916	20				2,800
	Burridge, Arthur A....(Int.)	B.A., McM	Phys. Cul		1916	5½			2,600	
	MacKay, Donald A	M.A., Queen's	Science		1916	19½	5		3,000	
	Kilpatrick, Jessie S	B.A., Queen's	Phys. Cul		1918	8	1½			2,400
	Irwin, Norman A	B.A., Queen's	Phys. Cul		1919	9½	1½		2,600	
	Thoms, Clarence J	B.A., McM	Eng. and Hist		1919	4½	3		2,400	
	Forward, Mrs. Ida F				1919	9½				1,800
	Smith, George R	B.A., Tor	Math		1920	10½	3½		2,900	
	Cowie, Helen....(Int.)	B.A., Tor	Mods. and Hist		1920	1½				2,300
	Tennant, Herbert M	B.A., Tor			1920	2½	3		1,900	
	Kenyon, William A....(Int.)	B.A., McM	Class	Phys. Cul.	1920	1½	2		2,100	
	Locklin, Elva J	B.A., Tor	Art		1920	8	4			1,900
	Ellis, George E....(Int.)	B.A., Queen's	Phys. Cul		1920	2½	3		2,300	
	McQueen, James M	M.A., Tor	Mods. and Hist....(Int.)		1921	4½			2,900	
	Atkinson, William D. T	B.A., Tor	Phys. Cul., (Int.) Class		1921	5			2,900	
	Dunlop, John J....(Int.)	B.A., Queen's	Eng. and Hist	Phys. Cul	1921	½	1		2,100	
	Irwin, Alfred H	B.A., Queen's	Phys. Cul		1921	10	1½		2,900	
	Poitras, Z. Emile....(Int.)	B.A., Ottawa		Phys. Cul.	1921	½	1		2,100	
	Sonley, Joseph A....(Int.)	B.A., Tor	Math. & Phys., Phys. Cul		1921	½			2,100	
	Keill, Lincoln G....(Int.)	B.A., Queen's	Class		1922				2,100	
Owen Sound	Elmslie, Wallace	B.A., Tor	Mods. and Hist		1909	20½		3,000		
	Packham, James H	B.A., Vic	Math. ,Com	Art	1884	38½	2		2,550	
	Brown Lyman	M.A., Tor	Class		1903	24½	1½		2,550	
	Robertson, George A	B.A., Tor	Science		1909	17½	5		2,550	
	Whitely, Lester R	B.A., Tor	Mods. and Hist		1910	19½			2,550	
	McKenzie, Russell, N	B.A., Tor	Math	Phys. Cul.	1921	6½			2,500	
	Dowkes, William J		Phys. Cul		1903	18	12		2,000	
	Power, Eva A		Com	Phys. Cul	1918	8½	3			1,800
	Somerville, Eva M		Art	Phys. Cul	1918	7				1,700
	Bridgman, Norma E	B.A., Queen's	Phys. Cul	Art	1921	2½	3			1,700
	Baxter, Helen F	B.A., Queen's		Phys. Cul	1921	2½	1½			1,700
	Prichard, Frances P		(Ho. Sci. Instr.)		1906	15				1,500
	Capel, John		(Man. Train. Instr.)		1919	3½	3		2,000	
Perth	Hardy, John H	B.A., Tor	Phys. Cul., Class		1921	5½		2,800		
	Mott, Stella K	B.A., Tor	Art, Eng. and Hist		1918	10½	4			2,000
	Raitt, Helena G	M.A. Queen's	Fr. and Ger	Phys. Cul	1919	9	1			2,000

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								Principal	Male Assistants	Female Assistants
								$	$	$
Perth (Con.) . .	McIlraith, Margaret I.	B.A., Queen's	Art. . . . . (Int.)	Phys. Cul.	1920	3	1	. . . . .	. . . . .	1,500
	Gillan, Ella E. . . . . (Int.)	B.A., Queen's	Math.	Phys. Cul.	1921	1½	. . . .	. . . . .	. . . . .	1,700
	Young, Ralph H.	B.A., Queen's	Science.	Phys. Cul.	1921	9	3	. . . . .	2,500	. . . . .
	Dickson, Helen M.	B.A., Queen's	Art. Com. . . . . (Int.)	Phys. Cul.	1922	8½	2	. . . . .	. . . . .	2,500
Peterborough . .	Kenner, Henry R. H.	B.A., Tor.	Class.	. . . . .	1893	33½	½	3,700	. . . . .	. . . . .
	Pettit, Louis J.	B.A., Queen's	Eng. and Hist.	. . . . .	1908	16½	3	. . . . .	2,700	. . . . .
	Jamieson, Clinton E. . . . . *	B.A., Qn's., LL.B., Man.	Phys. Cul. (Int.), Com.	. . . . .	1911	17½	1	. . . . .	2,700	. . . . .
	Morris, Francis, J. A.	M.A., Tor., B.A., Oxon. .	Class.	. . . . .	1913	11	. . . .	. . . . .	2,700	. . . . .
	Browne, Carl S.	M.A., McM.	Math. and Phys.	. . . . .	1914	8½	. . . .	. . . . .	2,700	. . . . .
	Henry, V. Roland.	M.A., Queen's.	Science.	. . . . .	1914	7½	. . . .	. . . . .	2,700	. . . . .
	Wallace, Muriel J. W.	B.A., Tor.	Phys. Cul., Mods. and Hist.	. . . . .	1917	6½	. . . .	. . . . .	. . . . .	2,575
	Zavitz, Arthur S.	B.A., Queen's	Math.	Phys. Cul.	1917	13½	3½	. . . . .	2,575	. . . . .
	Faint, Pearl B.	M.A., Tor.	Mods. and Hist.	. . . . .	1918	13½	. . . .	. . . . .	. . . . .	2,450
	Richardson, Lorne M.	B.A., Tor.	. . . . .	. . . . .	1919	2½	3	. . . . .	2,075	. . . . .
	Graham, Hugh H.	B.A., McM.	Science.	Agr., P. C.	1919	6½	. . . .	. . . . .	2,575	. . . . .
	Wilder, Marion E. . . . . (Int.)	B.A., Tor.	Eng. and Hist.	. . . . .	1920	1½	. . . .	. . . . .	. . . . .	1,900
	Elliott, Mary M. . . . . (Int.)	B.A., Tor.	Com.	. . . . .	1920	1½	. . . .	. . . . .	. . . . .	1,900
	Moffat, Hazel J. G. . . . . (Int.)	B.A., Tor.	Ho. Sci.	. . . . .	1921	½	. . . .	. . . . .	. . . . .	1,900
	Murphy, Edith A.	B.A., Queen's	. . . . .	Art.	1921	8	. . . .	. . . . .	. . . . .	2,000
	Redmond, E. Josephine.	B.A., Queen's	Art.	Phys. Cul.	1921	7½	½	. . . . .	. . . . .	2,000
Picton	Cooke, John A.	M.A., Queen's	Class.	. . . . .	1922	32	3	2,900	. . . . .	. . . . .
	Clinton, Nell M.	B.A., Queen's	Phys. Cul. . . . . (Int.)	. . . . .	1918	3½	4½	. . . . .	. . . . .	1,700
	Barker, George A.	. . . . .	Com.	. . . . .	1920	12½	11	. . . . .	1,900	. . . . .
	Marlin, Lewis A.	M.A., Queen's	Science.	. . . . .	1921	12½	7	. . . . .	2,500	. . . . .
	Philp, J. Henry	B.A., Queen's	Math. and Phys. (Int.) P.C.	. . . . .	1921	5½	. . . .	. . . . .	2,300	. . . . .
	Hammell, Ethel E. M.	B.A., Tor.	Eng. and Hist.	Phys. Cul.	1921	4½	9	. . . . .	. . . . .	1,700
	Tickell, L. Josephine . . . (Int.)	B.A., Tor.	Phys. Cul., Mods. and Hist.	. . . . .	1921	1½	. . . .	. . . . .	. . . . .	1,600

	Carscadden, Helen M. B.	B.A., Tor.	Art, Phys. Cul. (Int.)		1921	3	....	.....	.....	1,700
	Parker, Olive E. (Int.)	B.A., Tor.	Phys. Cul.		1921	2½	3	.....	.....	1,700
Port Arthur	Howell, William B. L.	B.A., Tor.	Class		1904	24	....	3,600	.....	.....
	Cranston, David L.	B.A., Tor.	Math.		1907	18	....	.....	3,100	.....
	Bull, Mary Jean	M.A., Tor.	Eng. and Hist.	Phys. Cul.	1920	3½	....	.....	.....	2,000
	Mackintosh, Agnes W.	B.A., Queen's	Eng. & Hist., Mods. & Hist.	Phys. Cul.	1920	4½	2	.....	.....	2,000
	Rayfield, Fred W. (Int.)	B.A., McM.		Phys. Cul.	1921	1	4	.....	2,000	.....
	Johnston, William B.	B.A., Queen's	Phys. Cul.		1919	5½	24	.....	2,400	.....
	Watson, Mabel A.		Phys. Cul. (Int.), Art.		1920	4½	1	.....	.....	1,900
	Bottoms, Emma M.		Com., Art.		1921	9½	9	.....	.....	2,000
	McKay, Jean E. (Temp.)				1921	½	1	.....	.....	1,600
	Irving, Anne C. (Temp.)	B.A., Tor.	(Ho. Sci. Instr.)		1921	½	½	.....	.....	1,400
	Seggie, David M. (Int.) (Teacher to be appointed)		(Man. Train. Instr.)		1921	½	1	.....	1,800	.....
Renfrew	Bryan, Hugh W.	M.A., Queen's	Class		1907	24½	....	2,900	.....	.....
	Baird, Alex. W.	M.A., Queen's	Eng., Hist., Fr. and Ger.		1908	13½	....	.....	2,500	.....
	Davies, Norman	B.A., McM.	Agr. (Int.), Sci., Phys. Cul.	Farm M.	1918	6½	....	.....	2,400	.....
	Higginson, Maria A.	B.A., Queen's	Math.	Phys. Cul.	1918	21	2½	.....	.....	2,100
	Richardson, Kate		Art (Int.), Com.		1920	26	8	.....	.....	2,000
	Scott, Rena C.		Phys. Cul. (Int.)	Agr.	1915	10½	2	.....	.....	1,800
	Ryan, Mae H.	B.A., Queen's	Art. (Int.)		1919	6½	....	.....	.....	1,700
	Coolican, Elsie T. (Int.)	B.A., Queen's		Phys. Cul.	1920	2	....	.....	.....	1,400
	McLachlan, Christena. (Int.)	B.A., Queen's	Eng. & Hist., Phys. Cul.		1921	4	4	.....	.....	1,800
	Phillips, Fred S.			Phys. Cul.	1922	5½	....	.....	1,800	.....
St. Catharines	Coombs, Albert E.	M.A., B.Paed., Tor.	Class		1909	29½	....	3,000	.....	.....
	Odlum, Eleanor D.	B.A., Trin.	Mods. and Hist.		1907	18½	1	.....	.....	2,300
	Montgomery, William	B.A., Tor.	Math.		1920	19½	....	.....	2,400	.....
	Jackson, John S.	B.A., Queen's	Science		1919	3½	2	.....	2,400	.....
	Anderson, Lillie C.		Com.		1912	18	3	.....	.....	2,200
	Dawson, Viola M. (Int.)				1920	1½	6	.....	.....	1,400
	Lauder, Beatrice G.	M.A., Queen's	Eng. and Hist.		1912	10	....	.....	.....	2,200
	MacKenzie, Eva F.		Art.		1914	13½	9½	.....	.....	1,950
	Bell, Lily M.	M.A., Western	Art. (Int.)		1918	4½	6	.....	.....	1,500
	Moyer, Lina R.	B.A., Tor.	Phys. Cul. (Int.)		1919	4½	....	.....	.....	1,600
	Poirier, Mary H.				1916	7½	1	.....	.....	1,800
	Stark, Ethyle M.	B.A., Tor.	Art.	Phys. Cul.	1920	6½	....	.....	.....	1,600
	Howie, Mabel F.		Com.	Phys. Cul.	1920	10	3	.....	.....	1,800
	Heinbecker, Edward G. (Int.)				1920	1½	3	.....	1,300	.....
	McVicar, Archibald	B.A., Tor.	Eng. and Hist.		1921	21	5½	.....	2,200	.....

* Also holds degree of B. C. L., King's College.

List of Principals and Assistants of Collegiate Institutes and High Schools, January, 1922 (Continued)

Collegiate Institutes	Names of Teachers	Degrees	Specialists	Elementary and Intermediate Certificates (In the case of Agr. and Hor. the Certificate is Intermediate.)	Date of appointment	No. of years' experience in High School or Coll. Inst.	No. of years in a Public School	Salaries		
								Principal	Male Assistants	Female Assistants
								$	$	$
St. Catharines. *Continued.*	Hill, Kenneth S.	B.A., Queen's			1921	2½			2,000	
	Logan, Meryol E. (Int.)				1921	½	5			1,300
	Millard, Lena			Art, Phys. Cul.	1921	7	3			1,800
	Chambers, Marjorie A.C. (Int.)		Phys. Cul		1922	2	1½			1,400
St. Mary's	Lamont, Alexander D	B.A., Queen's	Math. (Int.)	Phys. Cul	1920	3½	4	2,600		
	Macpherson, Mary K	B.A., Queen's	Ph. Cl. (Int.), Mods. & H		1918	4	½			1,800
	McLachlin, Janet E.		Art	Phys. Cul	1920	6½	4			1,600
	Bonis, Harry	B.A., Tor.	Class	Art, Phys. Cul.	1920	31	1		2,000	
	Stephens, James E.		Phys. Cul		1920	3	½		1,800	
	Massecar, Ethelyn. (Int.)	B.A., Queen's	Eng. and Hist	Phys. Cul	1920	1½	10			1,700
	Tanton, John	B.A., Queen's	Sci	Art, P. C., Agr.	1921	7½			2,300	
	Mallagh, Marjorie E. F. (Int.)	B.A., McM			1921	½				1,700
St. Thomas	Voaden, Arthur	M.A., Queen's	Eng. and Hist		1903	27	2	3,400		
	Bocking, William R.	M.A., Tor.	Ph. Cl. (Int.), Math. & Phys		1920	9½	1		2,700	
	Gray, George L.	B.A., Tor.	Eng. and Hist		1909	14½			2,700	
	Leibner, Ernest O.	B.A., Queen's	Science		1909	28			2,700	
	Southcombe, William J. S.	B.A., Tor.	Class., Phys. Cul		1921	6½			2,700	
	Thomas, Neil J.	B.A. Queen's	Art		1910	12	7½		2,700	
	Cook, Margaret	M.A., Tor.	Eng., Hist., Fr. and Ger		1903	26				2,700
	McPherson, Pearle	B.A., Queen's	Class		1921	7½				2,200
	Edge, Mary E.	B.A., Tor.	Eng. and Hist. (Int.)	Art, Phys. Cul.	1920	4½	1½			2,000
	Bodkin, Gertrude L.	B.A., West		Art, F.M. Agr.	1921	2	1			2,000
	Edgar, Margaret	B.A., McM		Phys. Cul	1921	2½	3½			2,000
	McNaughton, John L. (Int.)	B.A., McGill		Phys. Cul	1921	½			2,000	
	Wing, Henry			Agr	1908	19	9		2,400	
	Tanner, Anne M.		Phys. Cul., Com. (Int.)	Art	1917	5½	1			2.000

	Stone, Alice B.		Com.		1913	19½	8			2,500
	Tanner, Alice M.		Com.		1915	9½	1½			2,300
	Wallace, Mary H.	B.A., Tor.			1922	4½				2,000
	MacLaurin, M. Louise.. (Int.)	B.A., McM	Eng. and Hist.	Phys. Cul	1921	3	3			2,000
	Palmer, Ethel M.		Ho. Science		1914	8	5½			1,800
	Slatterie, Percy J. (Int.)		(Man. Train. Instr.)	Man. Train	1920	2			1,800	
Sarnia	Brown, Clarence L.	M.A., McM	Math.		1918	12	2	3,100		
	Grant, David M.	B.A., Tor.	Class.		1885	38			2,600	
	Dent, William A.		Science		1904	24	2		2,600	
	Story, Gladys S.	M.A., Queen's	Mods. and Hist.	Phys. Cul	1915	19				2,600
	Graham, Samuel T. H.	M.A., Tor.	Math. & Phys., Phys. Cul.		1919	4½			2,500	
	Harris, Mary A.	B.A., McM	Mods. and Hist.		1918	9½	½			2,200
	Cruickshank, Libbie		Com.		1913	16½	5			2,200
	Nichol, Christine B.		Art, Phys. Cul		1919	6				2,000
	Winhold, Edward P.		Phys. Cul. (Int.)		1920	4	1		2,200	
	Oaks, Anna M.	B.A., Tor.	Phys.Cul. (Int.), Mods.& H.		1921	3½				2,200
	Arnold, Leita E.	B.A., Queen's	Phys. Cul. (Int).		1921	4½				2,000
	Dinsmore, Herbert B.	B.A., Tor.	Phys. Cul		1921	2½			2,000	
	Dore, Harry C.			Phys. Cul	1921	2½	2½		2,000	
	Saunders, Lucy	B.A., West., M.A., Mich.	Eng. & Hist. (Int.), Art.		1921	7½	4½			2,000
	Lindsay, Bertie L.		Com.		1922	7	3			2,200
	DeFoe, Eugenie M.	B.A. Tor.	Art. (Int.) Phys. Cul.		1921	5½	5			2,000
Seaforth	Ross, John F.	M.A., Tor	Math. & Phys., Phys. Cul.		1913	8½	2½	2,900		
	Hazen, Arthur C.	M.A., Tor	Science. (Int.)	Phys. Cul	1915	6½	3½		2,400	
	Laing, Maybelle M.	B.A., Queen's	Mods. and Hist. (Int.)	Art	1920	7½	3			1,800
	Hartry, Norma I.		Art. (Int.)	Phys. Cul	1919	3	4			1,500
	Foreman, Bessie E. (Int.)	M.A., Queen's	Class.	Phys. Cul	1921	1½				1,700
	Fell, H. Jean. (Int.)	B.A., Queen's	Eng. and Hist.		1921	½				1,700
	Grieve, Bessie		Phys. Cul. (Int.)		1921	3½	4			1,700
Smith's Falls	Burns, Charles J.	B.A., Queen's	Class.		1912	12½		2,800		
	McWhorter, Mary A. V.	B.A., Tor.	Mods. and Hist.		1916	12				1,900
	Allin, Crawford S. (Int.)	B.A., Qn's., M.A., Col.	Math. and Phys		1920	2	2½		2,300	
	Shales, William E.	M.A., B.Pæd., Queen's.	Sci., Phys. Cul	Agr.	1921	7½	4		2,300	
	Keegan, Joseph D.		Com.		1919	16	13		1,900	
	McNeely, Elizabeth	B.A., Tor., M.A., Col.	Eng. and Hist.		1921	4½				1,900
	Sweeny, Agnes C.		Art, Phys. Cul. (Int.)		1920	16	3½			1,700
	Gordon, Mary M.		Phys, Cul	Art	1921	6½	3½			1,700
	Farmer, Bessie S.	B.A., McM	Mods.&Hist.(Int.), Ph. Cul		1921	4½	1			1,800
	Marshall, Helen Y. (Int.)	B.A., McM	Eng. and Hist.		1921	½	8			1,700

List of Principals and Assistants of Collegiate Institutes and High Schools, January, 1922 (Continued)

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								Principal	Male Assistants	Female Assistants
								$	$	$
Stratford	Mayberry, Charles A	B.A., LL.B., Tor	Class		1891	38	2	3,600		
	Malcolm, George	B.A., Queen's	Eng. and Hist		1890	37	6		2,800	
	Sprung, Whitfield L	B.A., Tor	Math. and Phys		1908	18	5		3,000	
	McQueen, Rose, J	B.A., Tor	Eng. and Hist		1912	14	1			2,600
	McMillan, William J	B.A., Tor	Science		1912	12½	5		2,700	
	Stuart, Muriel A	B.A., Tor	Mods. and Hist	Phys. Cul	1920	5				2,000
	Ross, Margaret C	B.A., Trin. Dublin	Phys. Cul (Int.)	Art	1921	7				1,900
	White, Harry S			Phys. Cul	1920	14½	2		2,300	
	Fuller, David S (Int.)	M.A., Tor	Math. and Phys	Phys. Cul	1920	1½			2,200	
	Davis, Irene P	B.A., Tor	Art	Phys. Cul	1916	7½	3			2,000
	Harper, Gertrude A	B.A., Tor	Com	Phys. Cul	1920	3½	3½			2,000
	Almas, Anna F	B.A., Tor	Mods. and Hist	Phys. Cul	1920	5½				1,900
	MacIntyre, Anna M		Phys. Cul	Art	1921	3½	2½			1,650
	Tench, Franklin J		Man. Train		1919	8½	6		2,000	
	Langford, Margaret I (Int.)		(Ho. Sci. Instr.)		1921	½	1			1,100
Strathroy	Sexton, James H	M.A., Queen's	Science		1914	25	9	3,000		
	King, Reginald H (Int.)	B.A., McM	Class., Phys. Cul		1920	2½			2,500	
	Henry, Elizabeth C	B.A., Queen's	Fr. & Ger., Mods. & Hist		1913	12½	13			1,700
	McKillop, Archie F	B.A., Queen's	Phys. Cul., (Int.), Math		1919	4			2,500	
	Mahon, Nellie L		Art, Phys, Cul		1921	9	4			1,700
	Brown, Georgia (Int.)	B.A., Tor	Com		1921	½	1			1,700
	Laughlin, Ruby, J			Art, Phys. Cul	1922	4½				1,700
Toronto, Harbord St.	Hagarty, Edward W	M.A., Tor	Class		1892	38		4,375		
	Glassey, David, A	B.A., Tor	Class		1906	27½			3,375	
	Wightman, Robert	B.A., Tor	Math		1908	24			3,375	

	Ivey, Thomas J	M.A., Tor	Science		1909	25½			3,375		
	Irwin, Herbert W	B.A., Tor	Mods. and Hist		1915	20			3,375		
	Sealey, Ethel M	B.A., Tor	Ph.Cl.(Int.), Mods. & Hist		1918	20	1			3,225	
	Robinson, Frances A	B.A., Tor., M.A., Col	Phy, Cul., Eng. & Hist		1915	10½	2½			2,725	
	Fraser, Charles G. (Jr.)	M.A., Tor	Science		1910	11½			2,975		
	Young, Edmund, T				1911	15	20		3,125		
	Hawkins, Maud M	B.A., Tor	Eng., Hist., Fr. and Ger		1911	21				3,125	
	Rochat, Mrs. Norma D	M.A., Tor	Mods. and Hist	Phys. Cul	1914	12				2,850	
	Knight, Carrie M	M.A., Tor	Class., Eng. and Hist	Phys. Cul	1913	12½				2,850	
	Adams, John H	B.A., Tor	Phys. Cul		1913	13½			2,975		
	Corbett, L. Hamilton	M.A., Tor	Mods. and Hist		1913	8½			2,850		
	Griffin, Selwyn P	B.A., Tor			1919	3			2,600		
	Asbury, Frank C	M.A., Tor	Math. and Phys		1919	5			2,225		
	MacGregor, Mrs. Jeanette E		Phys. Cul., Art., Com		1917	12	4			2,475	
	Affleck, Elsie J	M.A., Tor	Phys. Cul. (Int.) Class		1921	8½				2,500	
	Graham, Walter T. (Int.)	B.A., Tor	Sci		1921	½	1		2,200		
	Bell, Richard L. (Int.)	B.A., Tor	Math. & Phys., Phys. Cul		1921	½			2,100		
	Galloway, J. Louise	B.A., Tor	Mods. & Hist., Phys. Cul		1921	6½				2,500	
	Wilkinson, James E	B.A., Tor	Com		1921	9½	3		2,500		
	Houston, William J. (Int.)		Phys. Cul		1921	½	8		2,350		
Toronto, Humberside	Colbeck, Franklin C	B.A., Vic	Class., Eng		1894	35	1½	4,375			
	Gourlay, Richard	B.A., Tor	Class., Math		1893	35			3,375		
	Charles, Henrietta	B.A., Tor	Eng., Fr. and Ger		1901	35				3,375	
	Johnston, Frederick J	M.A., Tor	Science		1904	24	3		3,375		
	Bennett, John S	B.A., Tor	Class		1909	13½	6		3,225		
	Jermyn, Percy T	M.A., Tor	Eng. and Hist		1915	21	2		3,375		
	Stewart, Kate L	B.A., Tor	Eng. and Hist	Phys. Cul	1911	14	½			2,975	
	Patterson, Arnott M	M.A., Queen's	Science		1913	13½	1		3,100		
	Clarke, Bruce W	B.A., McM	Sci.(Int.), Ph.C., Math.&P		1913	10½			2,850		
	Colbeck, Wilhelmina L	B.A., Tor	Mods. and Hist	Phys. Cul	1913	9½				2,725	
	McQuarrie, Ernest C	B.A., Tor	Phys. Cul		1915	9½			2,600		
	Belcher, Norah T	B.A., Tor	Phys. Cul., Class		1918	9½				2,225	
	Preston, Gardiner A	B.A., Tor	Math. & Phys., Phys. Cul		1920	3½			2,075		
	Hatch, Salem B		Art, Com		1909	17	8		3,125		
	Evans, William A				1904	17½	20		3,125		
	Ward, Ada L	M.A., Tor	Mods. and Hist	Phys. Cul	1921	13	3			2,075	
	Nicholson, Elvira E	M.A., Tor	Mods. and Hist., Art	Phys. Cul	1921	7				2,075	
	Kinnee, H. Clarence	B.A., Tor	Math, & Phys., Phys. Cul		1921	7½	2		2,500		
	Squair, Marion R. (Int.)	M.A., Tor	Mods. and Hist	Phys. Cul	1921	½				2,000	

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								Principal	Male Assistants	Female Assistants
								$	$	$
Toronto, Humberside—*Continued.*	Kells, Emma M	M.A., Tor	Mods. and Hist	Art, Phys. Cul.	1921	7	...	.....	.....	2,500
	McRae, Caroline J.	B.A., Queen's	Eng. and Hist	Phys. Cul.	1921	7½	½	.....	.....	2,500
	Mackintosh, Helen C.	M.A., Queen's	Mods.&Hist.(Int.), Fr.&Gr		1921	11½	...	.....	.....	2,500
	Devitt, Leslie K.	.....	Phys. Cul.		1921	2½	1	.....	2,500	.....
Toronto, Jarvis	Jeffries, John	B.A., Tor	Eng., Hist., Fr. and Ger.		1907	34	1	3,975	.....	.....
	Jennings, William A.	B.A., Tor	Science		1907	15½	...	.....	3,350	.....
	Tapscott, Harry B.	M.A., McM. & Harv	Fr. and Ger		1912	17	6½	.....	3,375	.....
	Barnes, Charles L.	B.A., Tor	Class		1913	19	4½	.....	3,375	.....
	Hardy, Edwin A.	B.A., D.Pæd., Tor	Eng., Fr. and Ger.		1910	31	...	.....	3,225	.....
	Sinclair, John	B.A., Tor	Math		1917	33	8	.....	3,375	.....
	Thomas, Janie	M.A., Tor	Eng. and Hist		1882	39½	1	.....	.....	3,125
	O'Connell, Marguerite E. *	B.A., Queen's	E.&H. (Int.), Ph.C., F.& G.		1908	13½	3	.....	.....	3,125
	Barnes, Charles H.	.....	Phys. Cul.		1910	11½	16	.....	3,125	.....
	Durie, Helen F.	B.A., Tor., M.A., Col.	Phys. Cul.		1913	8½	...	.....	.....	2,850
	Allin, Arthur E.	M.A., Tor	Art		1913	8½	...	.....	2,725	.....
	McKellar, John	B.A., Tor	Math. and Phys		1919	5	...	.....	2,100	.....
	Moorhouse, Walter ... (Int.)	B.A,. Tor	.....	Art, Phys. Cul.	1919	3½	10	.....	2,225	.....
	Feasby, William J.	B.A., Queen's	Mods. & Hist., Fr. and Ger.		1919	13½	5	.....	2,125	.....
	St. John, Helen B. ..... (Int.)	B.A., Tor	Mods. and Hist	Phys. Cul.	1919	2½	...	.....	.....	1,975
	Smithson, Laura A.	M.A., Tor	Class		1920	9½	...	.....	.....	2,225
	McCamus, Marion K. ... (Int.)	B.A., Tor	.....	Art, Phys. Cul.	1921	1	7	.....	.....	1,975
	Grant, Christina C.	B.A., Tor	Mods. and Hist		1921	19½	9	.....	.....	2,500
	Hall, Everett O. ..... (Int.)	B.A., Tor	Math. & Phys., Phys. Cul.		1921	½	...	.....	2,000	.....
Toronto, Malvern Ave.	Lehman, Carl A. K.	B.A., Tor	Sci		1910	26	2	4,375	.....	.....

	Graham, Louis H	M.A., Tor.	Sci		1912	22	5½		3,375	
	Horton, Charles W	B.A., Queen's	Art, Eng. and Hist		1911	28	7		3,375	
	Lingwood, Frederick H	M.A., Tri., D.Pæd., Qn's.	Class		1910	29			3,225	
	Rogers, William H	M.A., Trin	Math		1920	19½	2		3,225	
	Barr, Lydia A	B.A., Tor.	Mods. and Hist		1908	29	9			3,162
	Dafoe, Helen I	B.A., Tor., M.A., Col	Ph. Cl. (Int.), Mods. & Hist.		1914	8½				2,725
	Clarke, Lorne H	B.A., McM	Phys. Cul., Math. & Phys.		1914	7½			2,600	
	Symons, Helen F	B.A., Tor	Eng. & Hist., Phys. Cul.		1918	6½				2,200
	Hisey, Abraham	B.A., McM	Phys. Cul. (Int.), Sci		1917	6½			2,100	
	Keeling, Wilford L	B.A., Tor.	Phys. Cul.		1920	4½	½		2,075	
	Ingham, Harriet	B.A., Tor.	E. & H., M. & H., Ph. Cul		1921	6½				2,075
	Blakely, Alex W (Int.)	B.A., Tor.		Phys. Cul	1921	1½			2,100	
	Muirhead, Jessie L	B.A., Tor.	Math. & Phys., Phys. Cul.		1921	4	3			2,400
Toronto, Oakwood	Gray, Robert A	B.A., Tor.	Math		1910	37		4,375		
	Clarke, Frederick H	B.A., Tor.	Eng. & Hist., Fr. & Ger		1908	26			3,375	
	Kennedy, Thomas	M.A., Queen's	Math		1908	22	2¾		3,375	
	Jewett, Albert E	B.A., Queen's	Sci		1908	34	3½		3,375	
	Dunkley, Albert W	M.A., Queen's	Class		1919	19			3,350	
	Brown, Harry W	B.A., Tor.	Eng. & Hist., Fr. & Ger		1915	27			3,350	
	Shortill, Robert N		Man. Train		1912	9½	26		2,975	
	McDonald, Evelyn	M.A., Tor	Mods. & Hist., Ph. C. (Int.)		1913	9½				2,600
	McQuarrie, George B	M.A., Tor	Class., Phys. Cul (Int.)		1919	9			2,725	
	Hanna, W. Edward	B.A., Queen's	Mods. & Hist., Phys. Cul.		1914	8½	5		2,850	
	Barton, Ambrose R	B.A., Tor.	Art., Phys. Cul		1914	7½	2		2,600	
	Jenkins, James T	B.A., Tor.	Ph. Cl. (Int.), Math. & Phys		1919	3½	4		2,600	
	Kirby, Luther H	B.A., Tor.	Sci		1919	4½			2,475	
	Quail, May F	M.A., Tor	Mod. & H. (Int.), F. & Ger.		1915	8½				2,600
	Bell, Edwin T	B.A., McM	Science	Agr., Phys. Cul.	1915	7½			2,475	
	Mowat, John H	B.A., Queen's	Ph. Cl. (Int.), Eng. & Hist.		1916	6	2		2,350	
	Evans, Rennie Mabel	B.A., Tor.	Math. & P. Art, Com. (Int.)		1916	6				2,225
	Phillips, Fitzallan	M.A., Tor.	Math. and Phys	Phys. Cul	1918	3½	1		1,975	
	Gilray, Roberta G	B.A., Tor.	Phys. Cul (Int.)		1918	11½				2,225
	Reade, Jessie B	B.A., Tor.	Class. (Int.), Phys. Cul		1919	4½				2,100
	Buchanan, Ruth C (Int.)	B.A., Queen's	Fr. and Ger	Phys. Cul	1920	1½				1,975
	Jackson, William A (Int.)	B.A., Tor.	Math. & Phys., Phys. Cul.		1920	1½	2		2,075	
	Nethercott, James P. S. (Int.)	M.A., Tor.		Phys. Cul	1920	2½	2		2,175	
	Horning, John H (Int.)	B.A., Tor.	Math. and Phys	Phys. Cul	1920	1½			2,175	
	Austin, Margery I	B.A., Tor.	Eng. and Hist	Phys. Cul	1920	4½				2,100
	Sinclair, Muriel G	B.A., Tor.	Ho. Sci	Phys. Cul	1921	2½				2,200
	Franklin, Helen A	B.A., Tor.	Eng. and Hist	Phys. Cul	1921	5½				2,400

* Qualified to teach Spanish

List of Principals and Assistants of Collegiate Institutes and High Schools, January, 1922 (Continued)

Collegiate Institutes	Names of Teachers	Degrees	Specialists	Elementary and Intermediate Certificates (In the case of Agr. and Hor. is the Certificate Intermediate)	Date of appointment	No. of years' experience in a High School or Coll. Inst.	No. of years in a Public School	Salaries		
								Principal	Male Assistants	Female Assistants
								$	$	$
Toronto Oakwood—*Con.*	McKinley, Clara B.	B.A., Tor.	Class		1921	9½	....	.....	.....	2,500
	Chantler, Gladys W. (Int.)	B.A., Tor.	Math. and Phys		1921	½	....	.....	.....	2,200
Toronto, Parkdale	Smith, Gilbert A.	B.A., Tor.	Science		1889	40	4	4,375	.....	.....
	Spence, Nellie	B.A., Tor.	Eng. and Class		1889	33	1	.....	.....	3,375
	Hillock, Julia S.	B.A., Tor.	Fr. and Ger		1900	28	....	.....	.....	3,375
	Cosens, Absalom	M.A., Ph.D., Tor.	Sci		1904	25	2	.....	3,375	.....
	Mills, John H.	M.A., Queen's	Class		1906	31	1	.....	3,375	.....
	Keith, George W	B.A., Tor.	Math		1912	23	....	.....	3,375	.....
	Dugit, Rosalie A.	M.A., Tor.	Phys. Cul. (Int.), Class		1913	13½	....	.....	.....	2,875
	Skirrow, William A.	M.A., Queen's	Math		1917	11½	....	.....	2,475	.....
	Reid, Thos. E.	B.A., Tor.	Phys. Cul. (Int.)		1905	17	8½	.....	3,125	.....
	Darroch, William F.		Phys. Cul. (Int.)		1910	12	16	.....	3,125	.....
	Hall, Marjorie S.	B.A., Tor.	Ph.Cul.(Int.), Mods. & Hist.		1920	3½	....	.....	.....	1,975
	Doherty, John C.	B.A., McM	Sci	Phys. Cul.	1919	11	....	.....	2,225	.....
	Edwards, Grace	M.A., Tor.	Mods. and Hist. (Int.)	Phys. Cul.	1918	13½	....	.....	.....	2,350
	Sanderson, Oliver N.	B.A., Tor.			1920	6½	....	.....	2,225	.....
	Smith, W. Wray	B.A., McM	Phys. Cul.		1919	5½	4½	.....	2,225	.....
	O'Neill, Albert E.	B.A., Queen's	Eng. and Hist.		1919	6½	....	.....	2,225	.....
	Delmage, Emelyn E.	B.A., McM	Math., Art	Phys. Cul.	1919	14½	....	.....	.....	2,225
	Ferguson, Elizabeth D.		Art		1919	3½	5	.....	.....	2,100
	White, Lloyd J.	B.A., Queen's		Phys. Cul.	1920	2½	....	.....	2,175	.....
	Horwood, Richard B. (Int.)	B.A., Tor.	Class		1921	½	....	.....	2,000	.....
	Clipperton, Otto L. (Int.)	B.A., Tor.	Mods. and Hist.		1921	1½	....	.....	2,500	.....
	St. John, Katherine I. (Int.)	B.A., Tor.	Mods. and Hist., Phys. Cul.		1921	1½	....	.....	.....	1,975

Toronto, Riverdale	Michell, William C.	B.A., Tor.	Class		1919	27	....	4,375	.....	.....
	Moore, James R.	M.A., Queen's	Sci		1907	23	½	.....	3,375	.....
	Wren, John S.	B.A., Tor.	Math		1907	23	....	.....	3,375	.....
	Willson, Alice M.	B.A., Tor.	Fr. and Ger		1908	18	4	.....	.....	3,375
	Watson, Erwin H. A.	B.A., Tor.	Mods. and Hist		1919	19	3	.....	3,375	.....
	McKinley, James M.	B.A., Tor.	Class		1919	22	....	.....	3,375	.....
	Kidd, Truman W.	B.A., Queen's	Art		1909	16½	6	.....	3,125	.....
	Dunnett, Alfred H.	B.A., Queen's	Phys. Cul		1911	10½	11½	.....	3,000	.....
	Nichol, S. Winnifred	M.A., Tor.	Phys. Cul., Mods. & Hist		1914	11½	....	.....	.....	2,625
	Flock, F. Arthur	B.A., Tor.	Science		1915	12	2½	.....	2,625	.....
	Goring, Ralph B.	B.A., Tor.	Math.& Ph. (Int.), Ph. Cul.		1915	7½	2½	.....	2,500	.....
	Lewis, Nora	B.A., Tor.	Class	Phys. Cul	1916	8½	....	.....	.....	2,375
	DeGuerre, Laura B.	B.A., Tor.	M.& H., Ph.Cl.(Int.), F.&G		1919	7½	....	.....	.....	2,125
	Campbell, Lillian M.	B.A., Tor.	Mods. and Hist		1919	6½	....	.....	.....	2,000
	Harper, Charles (Int.)	B.A., Queen's	Math. and Phys	Phys. Cul	1921	1½	3½	.....	1,975	.....
	Faw, Edward		Man. Train		1914	7½	21	.....	2,750	.....
	Smith, H. Kathleen (Int.)	B.A., Tor.	Ho. Sci		1919	2½	....	.....	.....	1,875
	Carstairs, John S.	B.A., Tor.	Eng. and Hist		1921	16½	7½	.....	2,500	.....
	Cook, Alta-Lind	B.A., Tor.	Mods. and Hist	Phys. Cul	1921	6½	....	.....	.....	2,350
	Russell, James W.	B.A., Tor.	Sci. (Int.), Art	Phys. Cul	1921	5½	....	.....	2,500	.....
	Arnott, Colin McK. (Int.)		Phys. Cul		1921	½	6	.....	2,300	.....
	Muir, Peter (Int.)	B.A., Queen's			1921	½	1	.....	2,300	.....
	Train, Florence B.	B.A., Tor.	Phys. Cul.(Int.), Math. & P		1921	4½	....	.....	.....	2,400
	Cryderman, May	B.A., Tor.	Eng. and Hist	Phys. Cul	1922	7½	½	.....	.....	2,500
Vankleek Hill	Rand, Wilfred E.	B.A., Tor.	Math	Phys. Cul	1920	29	1	2,800	.....	.....
	Mason, E. Winnifred	B.A., Tor.	Mods. & Hist., Phys. Cul.		1920	3½	....	.....	.....	1,800
	McDonald, Katherine M.(Int.)	M.A., Tor.	Class	Art	1920	3	5	.....	.....	1,800
	Hall, Margaret M. S.	B.A., Queen's	Art (Int.)	Phys. Cul	1921	11½	5	.....	.....	2,000
	Dippell, Louis W. (Int.)	B.A., Tor.	Sci	Phys. Cul	1921	½	....	.....	2,100	.....
	Ramsay, Jean B. (Int.)	B.A., Queen's	Com	Phys. Cul	1921	½	....	.....	.....	2,000
Windsor	Lowe, William D.	M.A., Queen's	Eng. & Hist.,(Int), Class		1908	13½	....	4,000	.....	.....
	Brunt, Robert A.	B.A., Tor.	Sci		1905	19	1	.....	2,800	.....
	Reid, Robert	B.A., Tor.	Eng. Hist., Fr. and Ger		1909	28	4	.....	2,850	.....
	Cleary, Norah	B.A., Tor.			1900	20½	....	.....	.....	2,400
	Cunningham, Evangeline	B.A., Tor.	Phys. Cul		1909	17	....	.....	.....	2,600
	Srigley, Edgar C.		Com		1911	27	5	.....	2,600	.....
	Thompson, Peter M.	M.A., Queen's	Sci		1913	21½	5	.....	2,800	.....
	Belton, Mildred	B.A., Tor.	Phys. Cul (Int.)		1915	7½	....	.....	.....	2,600

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								Principal	Male Assistants	Female Assistants
								$	$	$
Windsor—*Cont.*	O'Donoghue, Mary H	M.A., Tor	Phys. Cul., Mods. & Hist		1915	13				2,600
	Wheelton, Leonard	B.A., Queen's	Art		1915	13½	2		2,800	
	Campbell, George S	B.A., Tor	Math. and Phys	Phys. Cul	1916	7½	2		2,800	
	Downey, William H		Phys. Cul. (Int.)		1916	5½	18		2,600	
	Carson, William L		Man. Train		1918	3½	6		2,600	
	Doherty, Mabel O		Art. (Int.), Ph. Cul., Com		1918	19	2			2,400
	Firby, Mrs. Emma Ford		Com	Phys. Cul	1919	12½	4			2,400
	Hooper, Arthur G	M.A., Tor	Class		1919	8½	2		2,800	
	Foerster, Arthur J	M.A., Tor	Math. and Phys'		1919	2½			2,600	
	Whitton, Fred A	B.A., Queen's	Mods. & Hist., Fr. & Ger		1920	8½	½		2,800	
	McMaster, Maude H	B.A., Queen's	Ph. Cl. (Int.), Eng. & Hist		1920	4½	7			2,600
	Fritz, Myrtle E		Com. (Int.)		1921	6½	½			2,300
	Sirrs, Elmer J		(Man. Tr. Instr.), P.C (Int.)		1919	2½	2½		2,400	
	Ryan, Gertrude	B.A., Tor		Phys. Cul	1921	5½				2,300
	Hewitt, Cora E	B.A., Tor	Mods. and His., Phys. Cul		1921	9½	2½			2,500
	Gardiner, Myrtle E. (Int.)	B.A., Tor	Ho. Sci		1921	½				1,900
	Carscadden, Hazel L. (Int.)	B.A., Tor	Ho. Sci		1921	½	4			2,400
	Gilbert, Alfred F. S. (Int.)	B.A., B.S.C., Queen's. B.S.A., Tor	Sci., Agr		1921	½	4			2,500
	Garrett, Evelyn G	B.A., Queen's		Art, Phys. Cul	1921	9	3			2,300
Woodstock	Salter, Wesley J	B.A., Tor	Class		1907	14½		3,100		
	Hodgins, Ekron P	B.A., Tor	Sci	Phys. Cul	1919	8½			2,500	
	Lawr, John M	B.A., Queen's	Math	Phys. Cul	1917	10½	3		2,500	
	Trace, Cephas M	M.A., Queen's	Com., Art. (Int.)	Phys. Cul	1919	5½			2,300	
	Bole, Cecil L. (Int.)	B.A., Tor	Art	Phys. Cul	1920	2	4½		1,900	
	Entwistle, Merton L		Phys. Cul		1919	4½			1,900	
	Millar, Annie B	B.A., McM	Eng. and Hist	Art	1919	4½	5			1,800
	Hooker, Ida A	B.A., McM	Mods. and Hist. (Int.)	Phys. Cul	1919	2½				1,700

	Robinson, Mary A		Phys. Cul		1910	11	10			1,700
	MacKay, Emma L			Phys. Cul., Com	1910	11	3½			1,400
	Dent, Beatrice				1918	3½	1½			1,400
	Mercer, John S		Man. Train		1905	16	6½		1,700	
	White, Lila, K. G		(Ho.Sci.Instr.), Ph.Cl.(Int.)		1911	10	4½			1,500
	Clifford, Margaret K	M.A., B.Paed., Queen's	Eng. & Hist., Mods. & Hist.		1921	14½	5			2,300
	Rendall, Stanley D			Phys. Cul	1921	5			2,000	
	Hicks, Eleanor M			Phys. Cul., Art	1921	6	½			1,700
High Schools:										
Alexandria	MacKay, Donald	M.A., Tor	Class		1896	32	2½	2,250		
	Ostrom, Ethel L	B.A., Queen's	Art		1916	10				1,700
	Smith, James T			Phys. Cul	1921	5			2,000	
	Mulvihill, Mayme B	B.A. Tor		Art, Phys. Cul.	1921	5½	2			1,500
Alliston	Davidson, Hugh	B.A., Tor		Phys. Cul	1909	35	2	2,000		
	Thompson, Muriel H (Int.)	B.A., Tor	Eng. and Hist	Phys. Cul	1921	½				1,700
	Bell, M. F. Winifred			Art, Phys. Cul.	1921	12½				1,700
Almonte	Henry, Thomas McK	B.A., Tor	Math		1920	37½	4	2,600		
	Matthews, Jessie E	M.A., Tor		Phys. Cul	1908	13½	3			2,000
	Chisholm, Mrs. Jessie C	B.A., Queen's	Eng.,& Hist., Fr. and Ger.		1919	2½				1,400
	Waddell, Thomas K	B.A., Queen's		Agr., Phys. Cul.	1921	4			2,250	
Amherstburg	Overholt, B. Percy		Phys. Cul (Int.)		1910	13½	4	2,500		
	Wilson, Nora E		Phys. Cul		1920	2	4			1,700
	Brigham, Olvetta		Art (Int.)	Phys. Cul	1920	12½	4½			1,700
	Campbell, Gladys G (Int.)		Com	Phys. Cul	1921	2	3			1,800
Arnprior	Ross, Alex., H. D.,	M.A., Queen's, M.F. Yale	Math., Sci		1919	20½		2,800		
	Stothers, Minerva E	B.A., Queen's	Art		1916	13½				1,800
	Graham, Annie	B.A., Queen's		Phys. Cul	1919	2½	1			1,800
	Fleming, Earl A (Int.)		Phys. Cul		1920	1½	3½		1,700	
	Maus, Florence E	B.A., Queen's			1921	11/2	7			1,700
	Gendron, Muriel M	B.A., Tor	Phys. Cul (Int.)		1921	3½				1,700
	Graham, Gladys M	B.A., Queen's	Phys. Cul (Int.)		1921	2½				1,700
Arthur	McRitchie, Alexnader R	B.A., Tor	Agr. (Int.), Sci		1913	24½	7	2,250		
	Peck, Maud M	B.A., Tor		Phys. Cul	1921	3½	2			1,700
	McLaughlin, Verna J (Int.)			Art, Phys. Cul.	1921	1½	5			1,500
	Broad, Luella L	B. A., Tor		Art, Phys. Cul.	1922	7½				1,700
Athens	Burchell, James E	B.A., Queen's		Agr	1915	13½	12	2,400		
	Campbell Arch. D	B.A., McM	Math.&Phys., Phys.C(Int.)		1921	2½	1½		1,900	
	Sheridan, E. Mildred	B.A., Queen's	Mods. and Hist	Phys. Cul	1920	2½				1,700

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								Principal	Male Assistants	Female Assistants
								$	$	$
Athens—*Con.*	Cumming Mary E. (Int.)	B.A., Queen's	Eng. and Hist.	Phys. Cul.	1921	1	....	.....	.....	1,700
	Murray, Edith M.	.....	Art.	Phys. Cul.	1921	3½	2½	.....	.....	1,700
Aurora	Ewers, Charles F.	B.A., Queen's	.....	.....	1915	15	12	2,600	.....	.....
	Erb, William O.	B.A., Queen's	Math. and Phys.	Phys. Cul.	1921	2½	2	.....	2,000	.....
	Foreman, Kathleen B.	B.A., Queen's	.....	Phys. Cul.	1921	3½	2	.....	.....	1,800
	Morgan, Grace	B.A., Tor.	Art, Mods. and Hist.	Phys. Cul.	1918	3½	4	.....	.....	2,000
	Gillham, Blanche	.....	Art. (Int.)	Phys. Cul.	1922	4½	1	.....	.....	1,700
Avonmore	Barlow, Frederick J.	B.A., Tor.	Art.	Phys. Cul., Agr.	1921	7½	2	2,350	.....	.....
	Pacey, Mabel I.	.....	Phys. Cul.	Art.	1914	7½	1	.....	.....	1,700
	Wilson, Muriel K.	.....	.....	Art.	1919	3½	2½	.....	.....	1,500
Aylmer	Awde, Elgin O.	B.A., Queen's	.....	Phys. Cul.	1917	11½	2	2,500	.....	.....
	Campbell, John J.	.....	.....	Phys. Cul.	1920	4	....	.....	1,900	.....
	O'Neil, Jessie	B.A., Tor.	Phys. Cul.	.....	1919	3½	....	.....	.....	1,900
	Moore, Kathleen V.	B.A., Queen's	Art, Mods. and Hist. (Int.)	.....	1921	4	....	.....	.....	1,700
	Evans, Frances E. (Int.)	.....	.....	.....	1921	½	4½	.....	.....	1,300
Beamsville	Adams, John G.	B.A., Queen's	Agr. (Int.), Science	Farm Mech.	1919	6½	....	2,600	.....	.....
	Long, John A. (Int.)	B.A., McM.	Math. and Phys.	Phys. Cul.	1920	1½	....	.....	2,000	.....
	Gundry, Helen M.	B.A., Tor.	Art (Int.), Class.	Phys. Cul.	1920	16½	....	.....	.....	1,800
	Scott, Rhea V. (Int.)	B.A., Tor.	.....	.....	1921	2	5	.....	.....	1,700
	Smith, Lylla E. (Int.)	B.A., Tor.	Phys. Cul.	.....	1922	½	....	.....	.....	1,700
Belleville	MacLaurin, Peter C.	B.A., McM.	Sci.	Agr.	1909	17	....	3,100	.....	.....
	Stilwell, Ayrest L.	B.A., McM.	Phys. Cul.	.....	1921	6½	2	.....	2,300	.....
	Libby, Minnie F.	B.A., Vic.	Eng. & Hist., Fr. & Ger;	.....	1910	26	4	.....	.....	2,000

	Milburn, Edward F.	M.A., Trin			1870	51	....	.....	1,800	.....
	Hitchon, Claire H.	M.A., McM	Mods. & H. (Int.), Eng. & H.		1913	11½	....	.....	.....	2,000
	Affleck, Archibald A.	B.A., McM	Class		1919	8½	....	.....	2,400	.....
	Young, Madeline C.	B.A., McM	Eng. and Hist.		1919	4½	2	.....	.....	2,000
	Leuty, James H. S.		Phys. Cul.		1919	6½	1½	.....	2,000	.....
	James, George M.	B.A., LL.B., Tor		Art, Phys. Cul.	1920	10	15	.....	2,100	.....
	Fennell, Mary A. (Int.)	B.A., Tor		Com.	1920	2½	½	.....	.....	2,000
	Merry, Nellie P.	B.A., Queen's	Ph. Cul. (Int.), Eng. & Hist.		1920	4½	....	.....	.....	2,000
	Mangan, Mary F. (Temp.)	B.A., Queen's			1921	2	....	.....	.....	2,200
	Milne, James Wm.		Art (Int.), Man. Train.		1921	2½	3½	.....	2,000	.....
	Baker, Illah R. (Int.)		(Ho. Sci. Instr.)		1921	½	6	.....	.....	1,400
Bowmanville	Morrison, William J.	B.A., Tor	Science	Agr., P. C., F.M	1918	8½	5	2,700	.....	.....
	Smith, Isabel K.	B.A., Tor	Art	Phys. Cul.	1913	14	....	.....	.....	1,700
	Scott, Andrew R. (Int.)	B.A., Queen's	Math., Phys. Cul.		1921	1½	....	.....	2,100	.....
	Tighe, Elsie S.	B.A., Tor	Eng. and Hist.	Phys. Cul.	1921	4½	....	.....	.....	1,800
	Franklin, Marion M.	B.A., Tor	Phys. Cul. (Int.)		1921	3½	....	.....	.....	1,700
Bracebridge	Steer, Albert B.	B.A., Tor			1920	13	1	2,500	.....	.....
	Cameron, Jean B. (Int.)	B.A., Queen's			1921	½	1	.....	.....	1,700
	Donnelly, Mertis M. (Int.)	B.A., Tor		Phys. Cul.	1921	1½	....	.....	.....	1,700
	Logan, H. Beatrice			Art	1919	4½	....	.....	.....	1,700
Bradford	Keenan, Edward J.	B.A., Queen's		Phys. Cul.	1922	14½	2½	2,400	.....	.....
	Henry, Mamie E. (Int.)	B.A., Tor		Art, Phys. Cul.	1920	2	....	.....	.....	1,400
	Currie, Jessie E.		Phys. Cul. (Int.)		1918	3½	1	.....	.....	1,200
Brampton	Fenton, William J.	B.A., Tor	Class		1891	31	½	2,700	.....	.....
	Halnan, Lemen R.	M.A., Trin	Math		1905	18	3	.....	2,400	.....
	Martin, Thomas W.		Phys. Cul. (Int.)		1921	8½	....	.....	2,100	.....
	Rose, Marion H.		Fr. and Ger.		1921	26½	4	.....	.....	2,200
	Hutchinson, May R.		Phys. Cul. (Int.)	Art.	1910	18	6	.....	.....	2,000
	Stewart, E. Grace	B.A., Queen's	Phys. Cul., Art. (Int.)		1919	4½	2	.....	.....	1,800
	Summerby, Frederika	B.A., Queen's		Art.	1922	3	3½	.....	.....	1,700
Brighton	Bellamy, Wesley	B.A., Vic		Art.	1920	32	5½	2,400	.....	.....
	Hinds, Margaret J.			Phys. Cul.	1920	11½	3½	.....	.....	1,600
	Farley, Hazel	B.A., Tor	Art. (Int.)		1920	3½	....	.....	.....	1,600
Burford	Houser, Wilfred H.	M.A., Queen's	Math.		1921	11½	....	2,600	.....	.....
	McNair, Alice A.	B.A., Tor	Art. (Int.)	Phys. Cul.	1921	2½	....	.....	.....	1,700
	Pearce, Marion (Int.)	B.A., McM		Art, Phys. Cul.	1921	½	....	.....	.....	1,700

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								Principal	Male Assistants	Female Assistants
								$	$	$
Burlington	Smith, Daniel E.	B.A., Tor.		Agr., Phys. Cul.	1909	18	2	2,000		
	Snider, Madeline G. (Int.)	B.A., Tor.		Art, Phys. Cul.	1921	2				1,700
	Beers, Annie E. (Temp.)	B.A., Queen's			1921	½	5			1,600
Caledonia	Hicks, Thomas J.	B.A., Queen's		Phys. Cul	1913	9½	11½	2,200		
	Baldwin, Anah M. (Int.)	B.A., Tor.	Eng. and Hist., Phys. Cul.		1921	½	½			1,700
	Stuart, Norma K. (Int.)	B.A., Tor.		Art	1921	½				1,700
	Grant, Lucy M. (Int.)	B.A., Queen's	Phys. Cul		1921	½	2			1,800
Campbellford	Moffat, Thomas E.	B.A., Queen's			1916	15	2	2,750		
	O'Shaughnessy, Kathleen T.	B.A., Queen's	Phys. Cul. (In.)		1919	5	1			1,800
	Ferris, Kathleen B.	B.A., Tor.	Art.	Phys. Cul	1921	6½				1,800
	MacKay, Helen J. (Int.)	B.A., Tor.	Eng. and Hist.	Phys. Cul	1921	½				1,800
	Smith, Marion E.	B.A., Tor.	Phys. Cul		1921	3				1,800
	(Teacher to be appointed.)									
Carleton Place	McNeely, Priscilla V. M.	M.A., Trin.	Science		1913	12	1	2,300		
	Henderson, Orville J.			Art, Phys. Cul.	1920	4			1,700	
	Armstrong, Emily	B.A., Queen's	Phys. Cul	Art	1920	2½				1,700
	Turville, A. Dorothy (Int.)	B.A., West, M.A., Colum.		Art, Phys. Cul.	1921	1½				1,700
Cayuga	Campbell, Alexander	B.A., Tor.	Math		1921	30	3	2,400		
	McKnight, Mary G.	B.A., Tor.		Art	1921	4½	3			1,900
	Kerr, Helen M. (Int.)	B.A., McM	Mods. and Hist	Art	1921	½				1,700
	Brain, A. Beatrice	B.A., Tor.	Art	Phys. Cul	1922	10½	1			1,700
Chatsworth	Preston, Thomas	B.A., B.Pæd., Tor.	Science	Phy. Cul., Agr.	1919	26½	2	2,000		
	Webster, John G. (Int.)			Art	1920	1½	½		1,500	

Chesley	Wilson, Jas. Jos	B.A., Queen's		Phys. Cul	1920	5	7	2,500		
	Evans, Margaret Edna	B.A., Tor		Phys. Cul	1918	3½	1			1,800
	Shepley, J. Evelyn	B.A., Tor		Art	1921	3	2			1,800
	Lindsay, Edwin H				1922	7			2,000	
Caesterville	Harrison, Charles W	M.A., Vic		Phys. Cul	1921	30		2,000		
	Murphy, Gladys M (Int.)	B.A., Tor			1921	½				1,700
	Saunders, Alice I (Int.)	B.A., Queen's		Art	1921	½				1,700
Colborne	Kennedy, George E	B.A., Vic	Science	Phys. Cul	1921	29	4	2,400		
	Mitchell, May		Phys. Cul	Art	1921	13	5½			1,800
Cornwall	Caldwell, Alexander	B.A., Royal, Dublin	Com		1912	9½		2,600		
	Smith, Lyman C	B.A., Vic	Class., Eng. and Hist		1912	43½	2		2,200	
	Birchard, Alexander F		Phys. Cul., Com., Art		1898	27	12		2,000	
	Hendry, Earl D	B.A., Queen's	Phys. Cul		1916	6½	2		2,000	
	Tobin, Lilly S	B.A., Queen's	Mods. and Hist	Phys. Cul	1920	7½	3½			1,900
	Whelan, Frances J (Int.)	B.A., Tor		Phys. Cul	1920	1½				1,500
	McDougall, Jean L	B.A., Tor	Eng. and Hist	Phys. Cul	1921	2½				1,800
	Helmkay, I. Beatrice	B.A., Queen's	Math		1921	2				2,000
	McArton, Margaret H (Int.)	B.A., Queen's		Phys. Cul	1921	½				1,700
	Jamieson, Edith C (Int.)	M.A., Tor			1921	½				1,800
Deseronto	Leighton, Robert H	B.A., Queen's			1921	14½	19	2,100		
	Thompson, Helen I (Int.)	B.A., Queen's	Art		1921	½	⅓			1,700
	Stocker, Eva R		Phys. Cul (Int.)		1915	10½	4½			1,900
Dundalk	Wright, David T			Phys. Cul	1911	15½	10	2,000		
	McDermid, Ina E (Int.)	B.A., Queen's	Art	Phys. Cul	1920	1½				1,700
	Stanley, Lucille H (Int.)	B.A., Tor		Phys. Cul., Art	1920	1½				1,700
Dundas	Howson, Bruce F	B.A., Queen's	Math. and Phys	Phys. Cul	1919	12½	2	2,500		
	Hyde, Catherine I	B.A., Tor	Ho. Sci. (Int)., Phys. Cul		1915	6½	5			1,800
	Cowan, Jessie I	B.A., Tor	Art (Int.)	Phys. Cul	1920	3½	1			1,700
	Cawsey, Clare E (Int.)	B.A., Tor	Art	Phys. Cul	1921	4½				1,600
	Burk, Charlotte A	B.A., McM	Com (Int.)		1920	5½	1			1,600
	Summers, Doris M (Int.)	B.A., Tor			1921	½				1,550
Dunnville	Thompson, John F	M.A., D.Paed., Tor	Class		1918	19½	1	2,500		
	Stewart, James H	B.A., Queen's	Phys. Cul. (Int.), Art		1918	7½	2		2,200	
	Munro, Margaret K	B.A., Tor	Math	Phys. Cul	1920	10½	5½			2,000

List of Principals and Assistants of Collegiate Institutes and High Schools, January, 1922 (Continued)

High Schools	Names of Teachers	Degrees	Specialists	Elementary and Intermediate Certificates (In the case of Agr. and Hor. the Certificate is Intermediate.)	Date of appointment	No. of years' experience in a High School or Coll. Inst.	No. of years in a Public School	Salaries		
								Principal	Male Assistants	Female Assistants
								$	$	$
Dunnville	Ferguson, Muriel B.		Art		1921	8				1,900
	Lee, Elizabeth D. (Int.)			Art, Phys. Cul.	1921	1½	3½			1,500
Durham	Danard, Charles H.	B.A., Tor.	Phys. Cul		1921	6½	2½	2,400		
	Weir, Julia M.	B.A., Queen's	Art	Phys. Cul.	1915	9½	12			1,750
	Sillers, Annie M.	B.A., Queen's		Phys. Cul.	1921	2	9			1,700
	Harvey, Mary L. (Int.)	B.A., Tor.		Phys. Cul.	1921	1½				1,700
Dutton	Elliott, Thomas W.	B.A., Tor.	Science		1918	15½	11	2,300		
	Gartlan, Elizabeth	B.A., Tor.		Art, Phys. Cul.	1919	2½				1,700
	Castleman, Hilda V.	B.A., Queen's		Phys. Cul.	1919	2½				1,700
	Vrooman, Caroline L. (Int.)	B.A., West	Math. and Phys	Phys. Cul.	1920	1½				1,700
Elora	Park, Leonora	B.A., Tor.		Phys. Cul.	1921	4½	2	2,000		
	Smyth, Alice C. (Int.)		Art		1920	2½	2			1,500
	Pearson, Florence E.	B.A., Tor.		Phys. Cul.	1922	2½	2			1,800
Essex	Durnin, Edward W.	B.A., Tor.	Phys. Cul., Math. & Phys.		1919	7½		2,800		
	Smithendorf, Herbert F.			Phys. Cul., Agr.	1919	9½	4		2,100	
	Cole, Gertrude M. (Int.)	B.A., West		Phys. Cul.	1921	1½	2			1,700
	Chapman, Mrs. Retta M.			Phys. Cul., Art.	1919	8½				1,500
	Beaman, Elsie K.		Phys. Cul		1920	8½				1,500
Exeter	Wethey, Edmund J.	B.A., Trin., M.A., Tor.	Math		1919	21	1	2,200		
	Miller, Harry M. (Int.)	B.A., Queen's	Phys. Cul		1921	½			2,000	
	Ross, Margaret E.			Art	1921	5½	14			1,800
	Dorrance, Annie V.		Art, Phys. Cul.		1921	4½	6			1,700

Fergus	Knowles, John H	B.A., Queen's	Math. (Int.)	Phys. Cul.	1921	4	....	2,400	.....	.....
	Duncan, Muriel	B.A., Tor.	.....	Phys. Cul.	1920	6½	....	.....	.....	1,700
	McDonald, Vivian C	.....	.....	Art, Phys. Cul.	1920	6½	....	.....	.....	1,700
	Gillespie, Mary A	M.A., Tor.	Art. (Int.)	Phys. Cul.	1920	8	....	.....	.....	1,700
Flesherton	Upshall, Benjamin A	B.A., Tor.	Class	Phys. Cul.	1921	6	....	2,300	.....	.....
	Holmes, Margaret	B.A., Tor.	.....	.....	1914	7½	3	.....	.....	1,700
	King, Annie A	.....	Art. (Int.)	Phys. Cul.	1921	3	2	.....	.....	1,700
Forest	Williams, Albert	B.A., Queen's	.....	Phys. Cul.	1906	17	5	2,500	.....	.....
	Walker, Alexina A. C	.....	Art.	Phys. Cul.	1918	7	....	.....	.....	1,700
	Costin, Carrie L	B.A., Queen's	.....	Phys. Cul.	1921	5½	3	.....	.....	1,700
	(Teacher to be appointed)									
Fort Frances	Roszel, John M *	.....	.....	Phys. Cul.	1922	7½	15	2,300	.....	.....
	MacIntyre, Sada	.....	.....	Art, Com.	1919	9½	6	.....	.....	2,100
	O'Brian, Mabel B	B.A., Queen's	Math. and Phys. (Int.)	Phys. Cul., Art.	1922	11½	....	.....	.....	2,200
Gananoque	Ferguson, John	B.A., Queen's	.....	.....	1922	13	8	2,500	.....	.....
	Lewis, Elwood Roy	B.A., Queen's	Phys. Cul. (Int.)	.....	1918	3½	2	.....	1,800	.....
	Chown, Elizabeth	B.A., Queen's	Fr. & Ger. (Int.), Ph. Cul.	Art.	1921	3½	....	.....	.....	1,800
	Wood, Rachel L. E. (Int.)	B.A., Tor.	.....	Phys. Cul., Art.	1921	½	....	.....	.....	1,700
	Stewart, Margaret S. (Temp.)	B.A., Queen's	.....	.....	1921	½	1½	.....	.....	1,400
Georgetown	Ross, Ralph	B.A., B.Paed., Tor.	Class	Phys. Cul.	1914	34	....	2,500	.....	.....
	Delmage, Edith R	B.A., McM.	Math.	Phys. Cul.	1920	14	2	.....	.....	1,700
	Penson, Elizabeth	M.A., Queen's	Sci.	.....	1920	10	1	.....	.....	1,900
	Davidson, Annie K	B.A., Tor.	Art.	Phys. Cul.	1920	3½	....	.....	.....	1,600
	MacPherson, Rose	.....	.....	Art, Phys. Cul.	1921	3½	2	.....	.....	1,700
Glencoe	Yorke, Charles G	B.A., Queen's	Phys. Cul.	.....	1920	7½	4½	2,100	.....	.....
	Steele, Katharine R	B.A., Tor.	Eng. and Hist.	Phys. Cul., Art.	1918	3½	....	.....	.....	1,700
	Gillies, Marjorie A	B.A., Tor.	Phys. Cul.	Art.	1919	3½	....	.....	.....	1,700
Gravenhurst	McNab, Finlay	B.A., Queen's	.....	Phys. Cul.	1920	9½	7	2,100	.....	.....
	Broughton, Clara E	.....	.....	Art, Phys. Cul.	1906	16½	..	....	.....	1,400
	Ellis, Marjorie (Temp.)	B.A., Queen's	.....	.....	1922	....	....	.....	.....	1,700
Grimsby	Lawrence, Charles F	B.A., Tor.	Math. and Phys.	Phys. Cul.	1921	6½	5½	2,200	.....	.....
	Talbot, Constance M. (Int.)	B.A., Tor.	Eng. and Hist.	Phys. Cul.	1920	2½	....	.....	.....	1,500
	Scott, Jean L. (Int.)	.....	.....	Phys. Cul.	1920	1½	4	.....	.....	1,500
	Crowe, Marie (Int.)	B.A., Tor.	Art.	Phys. Cul.	1921	2½	....	.....	.....	1,500

* Temporary certificate as Principal

List of Principals and Assistants of Collegiate Institutes and High Schools, January, 1922 (Continued)

High Schools	Names of Teachers	Degrees	Specialists	Elementary and Intermediate Certificates (In the case of Agr. and Hor. the Certificate is Intermediate.)	Date of appointment	No. of years' experience in a High School or Coll. Inst.	No. of years in a Public School	Salaries		
								Principal	Male Assistants	Female Assistants
								$	$	$
Hagersville	McEachran, Mary	B.A., Queen's			1921	15½	7	2,300		
	Galbraith, Janet E.			Phys. Cul.	1919	2½	3½			1,200
	Bayne, Mary G.				1920	2½	1½			1,275
	Harrison, Alberta R. (Int.)	B.A., Tor.	Art		1921	½	5			1,725
Haileybury	Tuke, William H.	B.A., Queen's	Phys. Cul.	Agr.	1919	16		3,250		
	Hall, F. Grace	B.A., Tor.	Mods. and Hist.	Art, Phys. Cul.	1919	6	1			2,000
	Harkness, Andrew E. (Int.)	B.Sc., Queen's			1921	½	1½		2,000	
	Stewart, Winona	B.A., Queen's		Phys. Cul.	1921	6½	1			1,800
	Holley, Anna M.			Art	1921	4½	2			1,700
Harriston	Hobbs, Thomas	B.A., Tor.	Math.	Phys. Cul.	1911	19½	5½	2,600		
	Burton, Violet	B.A., Queen's	Class	Art	1921	2½	1			1,800
	Hambly, Ila M. (Int.)	B.A., Queen's		Art	1921	½				1,900
	Stillwell, Mabel W. (Int.)	B.A., Queen's	Fr. and Ger.	Art	1921	½				1,800
Hawkesbury	Shales, Walter E.	M.A., Queen's	Sci., Phys. Cul.	Agr.	1919	7½	5	2,200		
	Bryan, Laura M.			Art, Phys. Cul.	1918	4½	2			1,700
	McNamara, Elizabeth		Phys. Cul. (Int.)	Art	1921	8½				1,700
Iroquois	Campbell, William A.	B.A., Queen's	Phys. Cul.	Art	1913	8½		2,300		
	Husband, Edith P.	B.A., Queen's		Phys. Cul.	1918	5½	4			1,700
	Carman, Margaret E.	M.A., Tor.	Mods. and Hist.		1920	9½				1,700
	Harris, Una Madge	B.A., Queen's	Phys. Cul. (Int.)		1921	6				2,100
Kemptville	Medcof, James L.	B.A., Queen's	Science	Phys. Cul.	1915	6½	1	2,500		
	Butt, Stephen (Int.)	B.A., Tor.		Phys. Cul.	1921	½			1,800	

	Johnston, Katie B	B.A., Tor	Eng. and Hist	Phys. Cul	1911	10½	4			1,700
	Percival, Lois Mary	B.A., Queen's	Art	Phys. Cul	1918	4½				1,700
	Johnston Frances V	B.A. Tor		Phys. Cul	1913	8½	2			1,700
Kenora	Rosevear, Howard S	B.A., Tor., M.A. Harv	Com. (Int.,) Science		1922	26		3,500		
	Kenyon, Grace C	B.A., McM	Eng. and Hist., Class		1921	3½	3			1,900
	Stevenson, Clara M	B.A., Tor	Eng. and Hist		1921	3½				1,900
	Rutledge, Evelyn M		Art	Com	1921	5½				1,900
	Van Velzer, Alma (Int.)	B.A., Tor		Phys. Cul	1921	½				1,800
Kincardine	Nelson, Albert E	B.A., Queen's			1916	13½	6	2,700		
	Strathdee, Mary			Art, Agr	1921	7½	18			1,900
	Dobson, Viola J	B.A., Tor		Art, Phys. Cul	1919	6½				1,700
	Gilfillan, Viola	M.A., Tor		Phys. Cul	1920	7½				1,700
	Mitchell, Grace L		Art	Phys. Cul	1919	8½				1,400
Kingsville	Massey, Arthur W	B.A., Vic	Math., Eng		1921	27		2,500		
	Closs, Frank D		Sci	Phys. Cul	1921	22	2½		1,900	
	Hood, Annie I	B.A., Tor		Phys. Cul	1921	2½				1,700
	Mabee, Helen A (Int.)	B.A., McM	Eng. and Hist	Phys. Cul., Art	1921	½				1,700
Leamington	Courtice, Samuel J	B.A., Tor	Phys. Cul., Math		1917	18½	6	2,800		
	Campbell, George A			Agr	1908	13½	12		2,400	
	Halford, Aileen M (Int.)	B.A., Tor		Art, Phys. Cul	1922	2½				1,800
	Williams, G. Evelyn	B.A., Tor	Mods. and Hist	Phys. Cul	1921	3½				1,800
	Magee, Myrtle B (Int.)			Phys. Cul	1920	2	2½			1,700
	Switzer, Josie E				1922	10½	4			2,000
Listowel	Archibald, Robert H	B.A., Queen's		Phys. Cul	1920	11½		2,700		
	Smith, Percy V (Int.)	B.A., Tor		Phys. Cul	1921	½			1,900	
	Tatham, Beatrix M		Phys. Cul		1920	6½	3			1,700
	Johnston, Mabel C	B.A., Queen's	Art		1921	5	2½			1,700
	Hay, Hazel F	B.A., Tor		Phys. Cul	1916	5½				1,800
Lucan	Douglas, Adam C	B.A., Queen's		Phys. Cul	1920	9	2½	2,500		
	Sutherland, Donald A (Int.)	B.A., Queen's		Phys. Cul	1920	1½	4½		1,900	
	Hood, Rita M (Int.)	B.A., Tor		Art, Phys. Cul	1920	1½	½			1,700
	Norman, Clara H (Int.)	B.A., Queen's		Phys. Cul	1921	½				1,700
Madoc	Marcellus, J. Ernest	B.A., Queen's		Phys. Cul	1919	15	2	2,700		
	Sheridan, Edith G (Int.)	B.A., Tor	Eng. and Hist	Art	1921	½				1,800

List of Principals and Assistants of Collegiate Institutes and High Schools, January, 1922 (Continued)

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								Principal	Male Assistants	Female Assistants
								$	$	$
Madoc (Con.)	McArthur, Annie M	B.A., Queen's	Fr.&Ger., Mods.&H.(Int.)	Phys. Cul	1921	10	½			1,800
	Morton, Christina H			Art	1922	12				1,800
Markdale	Morrison, Selkirk A	B.A., Queen's	Eng. and Hist., Phys. Cul.		1919	19½	4	2,000		
	Mitchell, Isabella C			Phys. Cul	1921	8				1,700
	Wright, Jennie (Int.)	B.A., McM		Phys. Cul., Art	1921	½				1,700
Markham	Bell, James S	B.A., Tor		Phys. Cul	1912	12½	2	2,500		
	Beasley, A. Gertrude (Int.)	B.A., Tor	Mods. and Hist	Phys. Cul	1921	½				1,700
	Hutchinson, Gladys M		Art (Int.)	Phys. Cul	1921	4½	2			1,700
	Ramsden, Frank C (Int.)		Phys. Cul		1921	½	2			1,600
Meaford	Dundas, Arthur A	B.A., Tor			1897	25	2	2,800		
	Williams, Edna J	B.A., Tor		Phys. Cul	1912	14½				2,300
	Ballantyne, George A	M.A., Tor	Math. and Phys	Phys. Cul	1921	2½			2,300	
	Day, Helen G (Int.)	B.A., Tor	Eng. and Hist	Art	1921	½				1,800
	Hammond, John E		Com	Art	1906	15½	3		1,600	
Midland	Glass, William Arthur	B.A., Tor		Phys. Cul	1904	19½		2,800		
	Boyle, Edna M	B.A., Tor	Math. and Phys	Phys. Cul	1915	6½	1			2,100
	Robins, John J (Int.)	B.A., Tor	Phys. Cul		1920	1½	3		2,100	
	Newton, Amy A	B.A., Tor	Mods. and Hist., Phys. Cul.		1920	5½				1,700
	Govenlock, Janet S		Art	Phys. Cul	1921	4½	1			1,700
Milton	Hamilton, James A	M.A., Tor	Math (Int.)		1920	14½		2,000		
	Nesbitt, Mabel E	B.A., Queen's	Phys. Cul (Int.)		1921	9				1,800
	Smith, Anne A			Phys. Cul., Art	1921	7½	3½			1,800
	Linklater, Jessie L (Int.)			Phys. Cul., Art	1921	4	13			1,500
	Toll, Charles E (Int.)		Phys. Cul		1921	1½	3		1,800	

Mitchell	Wightman, Stanley	B.A., Queen's			Phys. Cul	1919	17½	2½	2,300		
	Donaldson, William	B.A., Tor	Sci		Agr	1921	20	5½		2,000	
	Rutherford, Wilhelmina D		Art			1920	9½	4			1,750
	Galbraith, Flossie P. (Int.)	B.A., Tor			Phys. Cul	1921	½				1,700
Morewood	Loucks, Horatio	B.A., Queen's				1900	19½	5	2,300		
	Murphy, Theresa N. (Int.)	B.A., Tor			Phys. Cul., Art	1921	½				1,700
Mount Forest	Speirs, Thomas E	B.A., Tor	Math. and Phys			1907	15½	2	2,500		
	Fothergill, Ethel L		Art (Int.)		Phys. Cul	1919	5½	1			1,700
	Thain, Mary M (Int.)	B.A., Queen's				1921	½	1			1,600
	Haight, Annie (Int.)	B.A., Queen's	Phys. Cul			1921	3	1			1,600
Newburgh	Andrews, Robert T	B.A., Tor	Class			1910	17½	14	1,800		
	Switzer, Neva S		Art			1921	5½				1,700
	McSherry, Charlotte					1922	3½	3			1,700
Newcastle	Might, Lincoln	M.A., Queen's	Art, Sci		Agr., F.M,, P.C.	1921	23½	2	2,000		
	Turnbull, Ella W. (Temp.)					1921	½	2			1,300
Newmarket	Davidson, John H	M.A., B.Pæd., Tor	Math		Phys. Cul	1917	19	5	2,500		
	Kidd, William L				Phys. Cul	1910	17	10		2,100	
	Hollingshead, John E					1884	37	2½		1,800	
	Wickett, Laura E		Com		Art	1909	12½	1			1,800
	Kirkwood, Elizabeth M				Art, Phys. Cul.	1919	4	17			1,500
	Crain, Mrs. Kathleen H		Fr. and Ger			1921	13½	1			1,600
	Grindell, Hazel		Art (Int.)			1921	3½	1			1,500
	Gardiner, Alex. Beith (Int.)	B.A., Queen's	Phys. Cul			1921	½	4½		2,000	
Niagara	Haviland, Hugh J	B.A., Tor	Class		Phys. Cul., Agr.	1921	21		1,900		
	MacIntyre, Lillian		Art		Phys. Cul	1921	8	2			1,700
Niagara Falls South	Myer, Albert N	M.A., Trin	Math			1908	27½		2,800		
	Porter, William A				Agr., F.M., P.C.	1916	6½	2		2,000	
	Johnston, E. Grace	B.A., Queen's			Phys. Cul	1914	8½	2			1,900
	Campbell, Minnie M	B.A., Queen's	Com., Art			1919	10½	6			1,900
	Dawson, Margaret M				Com	1907	14	2			1,900
	Courboin, Jules P. (Temp.)	Ph. D., Louvain				1921	½			1,900	
	Gardner, Ruth V		(Ho. Sci. Instr.)			1913	8				
	Vandersluys, Major C. H*		Phys. Cul			1920	17	10			

*Qualified for Physical Culture only.

List of Principals and Assistants of Collegiate Institutes and High Schools, January, 1922 (Continued)

Collegiate Institutes.	Names of Teachers	Degrees	Specialists	Elementary and Intermediate Certificates (In the case of Agr. and Hor. the Certificate is Intermediate.)	Date of appointment	No. of years' experience in a High School or Coll. Inst.	No. of years in a Public School	Salaries		
								Principal	Male Assistants	Female Assistants
Norwich	Young, Gordon *			Phys. Cul	1917	4½	8	2,000		
	Templar, Nora G			Art	1919	2½	2			1,500
	Yates, Clara V. (Int.)			Art	1921	½	3			1,400
	McEachern, Margaret I. (Int.)	B.A., Queen's			1922	4	9			1,500
Norwood	Lawlor, Richard G	B.A., Queen's		Phys. Cul. Agr.	1908	20½	8	2,300		
	Sangster, Grace	B.A., Queen's	Art (Int.)		1919	3	2			1,800
	Darby, Laura W	B.A., Mt. Allison		Phys. Cul	1921	2½				1,600
Oakville	Wyndham, William B	B.A., Tor	Eng., Hist., Fr. and Ger	Agr., Phys. Cul.	1914	25	6½	2,600		
	McVean, Kathleen P	B.A., Tor	Phys. Cul	Art	1920	4½				1,800
	Ribey, Florence E. (Int.)	M.A., Tor	Class., Phys. Cul		1920	1½				1,800
	Moir, Mary A		Com		1921	16½				1,800
	Morris, Winifred		Art	Phys. Cul	1921	7½	4½			1,700
Omemee	O'Neill, Morgan J	M.A., Queen's	Math. and Phys	Phys. Cul	1921	7½	2½	2,200		
	Alderson, Bessie G		Art (Int.)	Phys. Cul	1921	2½	2			1,600
Orangeville	Hackett, Edward	B.A., Dublin			1915	12½		2,600		
	Strang, Grace M	B.A., Tor	Mods. and Hist		1907	15½				1,800
	Cook, Marjorie	B.A., Tor	Science		1919	2½				1,700
	Moir, Isabel		Com	Art	1920	14½	8			2,000
	Brown, Grace H. (Int.)	B.A., Tor	Phys. Cul		1921	1				1,700
	Whitelaw, Florence M	B.A., Tor			1921	½	3			1,700
Oshawa	Althouse, John G	M.A., Tor	Class., Phys. Cul		1920	8½		3,500		
	Stevenson, Lewis	B.A., B.Sc., Vic	Math., Science		1902	29	3		2,700	

	Ferguson, Arthur W	B.A., Queen's	Phys. Cul., Math		1920	5½	1		2,500	
	Hamer, Lottie E	B.A., Tor	Mods. & Hist., Phys. Cul		1920	8	2½			2,000
	McBride, Sara M		Art	Phys. Cul	1920	17½				1,900
	Armstrong, Florence J		Phys. Cul (Int.)		1920	11	5			1,800
	Cummer, Elvina M		Com		1920	16½				2,300
	Wallace, Andrew (Int.)	B.A., Queen's			1921	1½	2		2,000	
	Brown, Una K	B.A., Tor	Com (Int.)		1921	2½	6			1,800
	Hezzlewood, Mrs. Margaret M				1921	6½	3			1,700
Paris	Willson, H. Blanche	B.A,, Tor	Math	Phys. Cul	1912	9½	1¼	2 000		
	Noonan, Aileen	M.A., Tor	Mods. and Hist	Phys. Cul	1919	5½				2,000
	Jamieson, Elmer (Int.)	B.A., McM	Science	Phys. Cul	1920	1½	2		1,900	
	Cowan, Margaret T	B.A., Tor	Class		1922	13				2,000
	Reid, Neil D (Int.)	B.A., Tor			1922	4	2		1,800	
Parkhill	Cooper, Alex. B	B.A., Queen's	(Superv. Vocal Music)		1920	18½	8	2,500		
	Ovens, Winifred E	B.A., West		Phys. Cul	1921	11½				1,800
	Bishop, Elvie L (Int.)	M.A., Tor	Math. and Phys		1921	½				1,600
	Tully, Oral L (Int.)			Art	1921	2	2½			1,700
Parry Sound	Cameron, James M	B.A., Tor	Science	Phys. Cul	1919	6	1¼	2,500		
	Tudhope, Horace H (Int.)	B.A., Queen's		Phys. Cul	1921	2½	5		1,800	
	Hall, Henry W			Phys. Cul	1921	5			1,800	
	Cowan, Anna K		Art	Phys. Cul	1921	4½	1			1,700
Pembroke	Flach, Ulysses J	M.A., Tor	Math		1913	34		2,740		
	Dickey, M. Ada	B.A., Tor	Mods. and Hist		1914	19				2,260
	Cowan, Euphemia J	M.A., Tor	Phys. Cul (Int.)		1920	11½				2,100
	Milhausen, Albert J	B.A., Queen's		Phys. Cul	1921	3	3		2,100	
	Millar, Margaret G	B.A., Tor	Art (Int.)		1921	5	4			2,000
	Heather, Ruth B		Com	Phys. Cul	1921	6½				1,900
	De la Mater, Magdalene		Phys. Cul		1922	12				1,700
Penotanguis'ne	Keefe, R. Daniel	B.A., Tor			1907	19½		2,400		
	Sweet, Fred G		Com (Int.)		1911	12	4½		1,900	
	Eaton, Ethel C			Art, Phys. Cul	1921	8½	3			1,700
Petrolia	MacKichan, Peter	B.A., Queen's		Phys. Cul	1920	7½	3	2,500		
	McPhail, Alexander C	B.A., Queen's			1910	27½	9½		1,800	
	Jones, Rachel L. L	M.A., West	Phys. Cul		1918	5½	1½			1,800
	McGugan, Mary C (Int.)	B.A., Queen's		Art, Phys. Cul	1921	½	6			1,700
	Young, Marion J (Int.)	B.A., Queen's			1922		2			1,700

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List of Principals and Assistants of Collegiate Institutes and High Schools, January, 1922 (Continued)

High Schools	Names of Teachers	Degrees	Specialists	Elementary and Intermediate Certificates (In the case of Agr. and Hor. the Certificate is Intermediate.)	Date of appointment	No. of years' experience in a High School or Coll. Inst.	No. of years in a Public School	Salaries		
								Principal	Male Assistants	Female Assistants
								$	$	$
Plantagenet...	Nelson, Eva E.	B.A., Queen's		Phys. Cul.	1921	4½	....	2,000	.....	.....
	Murtha, Ella T.		Art. (Int.)	Phys. Cul.	1919	2½	2	.....	.....	1,700
	Bouchard, Mary A. C.	B.A., Queen's	Phy. Cl. (Int.), Mod. & Hist		1921	2½	....	.....	.....	1,700
Port Dover....	Ionson, Margaret	B.A., Queen's	Phys. Cul. (Int.)		1918	6	11	1,900	.....	.....
	Brand, Olive C. (Int.)			Art.	1920	1½	2½	.....	.....	1,600
Port Elgin.....	Gilmour, Allan	B.A., Queen's		Phys. Cul.	1921	15	4½	2,200	.....	.....
	McLaren, Caroline E. (Int.)	B.A., Queen's	Science	Phys. Cul.	1920	1½	½	.....	.....	1,700
	Nephew, Ruth (Temp.)			Art.	1921	½	2	.....	.....	1,200
Port Hope.....	Evans, George E.	M.A., Tor	Class	Phys. Cul.	1919	8½	....	2,900	.....	.....
	Tuer, Margaret		Art, Com.	Phys. Cul.	1910	15	5	.....	.....	1,800
	Quinlan, Frances M.	B.A., Tor.	Mods. and Hist.	Phys. Cul.	1919	4½	1½	.....	.....	1,700
	Hay, James A. M. (Int.)	B.A., McM.	Math. and Phys.	Phys. Cul.	1920	1½	....	.....	2,000	.....
	Roach, Edith E.	B.A., Tor.	Mods. and Hist., Phys. Cul.		1922	2½	....	.....	.....	2,000
	Campbell, Hugh M. (Temp.)	B.S.A., Tor.			1921	½	....	.....	1,800	.....
	Mitchell, Jessie A.	B.A., Tor.	Art. (Int.)		1921	21	9	.....	.....	1,500
Port Perry.....	Follick, Thomas H.	M.A., Vic.	Science	F.M., Agr., Mus	1915	31½	2	2,050	.....	.....
	Stone, George				1883	40	4	.....	2,000	.....
	Harris, L. Morwenna		Art.	Phys. Cul.	1912	11½	1½	.....	.....	1,700
	Glasgow, Marion I.		(Ho. Sci. Instr.)	Phys. Cul.	1918	5½	....	.....	.....	1,700
	Bartley, Hattie M.				1922	5½	12½	.....	.....	1,800
Port Rowan....	Carter, George W. *	M. A., Tor			1921	3	2	2,000	.....	.....
	McDonagh, Charlotta A. (Int.)				1921	1	5	.....	.....	1,450

Prescott	Greig, Earl H	B.A., Queen's	Phys. Cul		1916	5½		2,350		
	Goulding, Hanna M		Art (Int.) Phys. Cul		1911	18½	2½			1,900
	Macpherson, Jean M	B.A., Queen's		Phys. Cul	1921	2½				1,700
	MacRobert, Ethel M...(Int.)	B.A., Tor			1922	½				1,800
Richmond Hill	Elliott, Thomas E	B.A., Tor	Fr., Ger., Eng		1920	33		2,300		
	Stanley, Pauline M	B.A., West			1920	3½				1,500
	Collins, Warren A.....(Int.)				1921	1	1		1,500	
Ridgetown	Cameron, James G	B.A., Queen's		Art, Phys. Cul	1919	20½	14½	2,500		
	Strang, Rose I			Phys. Cul	1921	24				1,700
	Currie, Robert J.....(Int.)				1921	½	2½		1,700	
	Franklin, Florence A...(Int.)	B.A., McM	Phys. Cul	Art	1921	½				1,700
	Hilliard, Ruth.....(Temp.)				1922					1,700
Rockland	Clark, Joseph C	B.A., Tor	Class	Phys. Cul	1920	24	2½	1,600		
	O'Toole, Mary E		Art.....(Int.)		1920	1½	2½			1,400
	(Teacher to be appointed)									
Sault Ste. Marie	Rudlen, George W	B.A., Tor	Math		1904	23		4,000		
	McKinnon, Charles	B.A., Tor., M.A., Chi	Phys. Cul., Class		1917	17	3½		3,000	
	Robb, James A. M	B.A., Queen's	Phys. Cul.....(Int.)		1919	2½	½		2,200	
	Sabine, Ernest L.....(Int.)	B.A., Queen's	Eng. and Hist	Phys. Cul., Art	1920	1½	11		2,200	
	Gordon, John G.....(Int.)	B.A., Queen's	Sci		1921	6	12½		2,600	2,800
	Clayton, Vivian, E	B.A., Man	Art, Com		1908	15½	1½			2,000
	Crummer, Eva M		Phys. Cul.....(Int.)		1917	12	1½			2,200
	Irving, Jessie C	B.A., Tor	Math. and Phys		1919	6½				2,400
	Scott, Ethel O	M.A., Tor	Mods.&Hist.(Int.),Fr&Ger.	Phys. Cul	1920	9½	4½			2,400
	Smith, S. Ada	M.A., Tor	Mods. & Hist. (Int.), Com..	Phys. Cul	1920	8½				2,000
	Maxwell, Mabel I	B.A., Queen's		Art, Phys. Cul.	1921	5½	2			1,700
	Ferguson, Evalena	B.A., Queen's		Phys. Cul	1921	3½				1,800
	McIntosh, Margaret...(Int.)	B.A., Tor		Phys. Cul	1921	1½				2,000
	Shepard, Gladys H.....(Int.)	B.A., Tor	Mods. and Hist		1922	½	1			
	Clary, Arthur R	B.A., Sc., Tor	Phys. Cul		1922	2½	½		2,000	
	Later, Thomas J		Man. Train		1910	11	10		2,800	2,000
	Shaw, Mary P		(Ho. Sci. Instr.)		1910	15				1,700
Shelburne	Butcher, C. Ward	B.A., Queen's	Math	Phys. Cul	1919	8½	3½	2,700		
	Eckhardt, Jessie E	B.A., McGill		Phys. Cul	1918	9½	2			1,800
	Harkley, Helen S.....(Int.)			Art, Phys. Cul.	1921	½	5			1,200

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List of Principals and Assistants of Collegiate Institutes and High Schools, January, 1922 (Continued)

High Schools	Names of Teachers	Degrees	Specialists	Elementary and Intermediate Certificates (In the case of Agr. and Hor. the Certificate is Intermediate.)	Date of appointment	No. of years' experience in a High School or Coll. Inst.	No. of years in a Public School	Salaries		
								Principal	Male Assistants	Female Assistants
								$	$	$
Simcoe	Skeele, James E	B.A., Tor.			1921	29		2,500		
	Christie, James D.	B.A., Tor.	Eng., Fr. and Ger.		1889	43			2,050	
	Inglis, John LeRoy (Int.)	B.A., Queen's			1921	1½			2,000	
	Kennedy, Anna	B.A., Tor.			1921	5½				1,900
	Orr, Wilma N. (Int.)	B.A., Tor.			1921	½				1,800
	Finch, Ilma Mae	B.A., Tor.	Art	Phys. Cul.	1921	7½				1,700
Smithville	Judge, Albert E	B.A., Queen's		Phys. Cul.	1920	5½		2,200		
	Traver, Edith A			Phys. Cul.	1920	9½	2			1,700
	Ross, Helen I. C. (Int.)		Art	Phys. Cul.	1920	1½	2			1,500
Stirling	Forbes, William B	B.A., Queen's	Phys. Cul., Science		1921	26	1	2,200		
	Harrington, Marjorie L.	B.A., Tor.			1921	2½				1,700
	Brandon, Norma P. (Int.)	B.A., Tor.	Art	Phys. Cul.	1921	2				1,700
	Heather, Eunice G			Phys. Cul.	1921	2	5			1,500
Streetsville	Jenkins, Robert S	M.A., Tor.	Class., Fr., Ger., Eng. & H.		1921	16		2,200		
	Gerhart, Harry W			Phys. Cul.	1913				1,900	
Sudbury	Cornwell, John L	B.A., Tor.	Math		1920	29½		4,000		
	Green, Walter H. H	B.A., Queen's	Phys. Cul. (Int.), Sci.		1921	6			3,100	
	Connor, Carl Y	B.A., Tor.	Art (Int.)		1921	2½	2		2,800	
	Rose, Kathleen M	B.A., Queen's	Math		1917	4½				2,400
	Wilkie, Marion F	B.A., Tor.	Fr. and Ger.	Phys. Cul.	1921	11				2,400
	Steele, Walter S	B.A., Queen's	Phys. Cul. (Int.)		1921	4½	7½		2,300	
	Millar, Maude		Art, Phys. Cul.		1921	7	½			2,100

Sydenham	Sine, Frederick	M.A., B.Sc., Queen's	Science (Int.)	Agr	1915	14½	5	2,500		
	Oatway, George A (Int.)	B.A., Queen's		Phys. Cul	1921	1½	2		1,800	
	McLean, Helen G	B.A., Queen's		Phys. Cul	1921	2½	½			1,700
	Daviss, Alfred E (Int.)	M.A., Dalhousie		Phys. Cul	1922	½			1,700	
Thorold	Haynes, Andrew C	B.A., Tor	Phys. Cul (Int.)	Voc. Mus	1920	10½	3	2,600		
	Floody, Lily M (Int.)	B.A., Tor	Math. and Phys	Phys. Cul	1921	½				1,900
	O'Connor, Kathleen B			Art, Phys. Cul.	1921	6½	2			1,700
	Clark, Alice B		Phys. Cul (Int.)	Art	1920	3½	2			1,800
Tillsonburg	Auld, Charles	B.A., Tor	Math		1914	27		2,500		
	Hindson, Hilda M		Phys. Cul. (Int.), Com.	Art	1904	17	6			1,800
	Kennedy, Jessie	B.A., Queen's	Phys. Cul		1920	6	½			1,700
	Holland, Kathleen M (Int.)	B.A., West	Phys. Cul		1921	1½				1,700
	Sinclair, Robt. J		Phys. Cul	Agr	1915	10½	2		2,200	
	Ingham, Bruce E	M.A., Tor	Eng. & Hist., Mod. & Hist.		1921	2½			1,700	
Toronto, Commerce	Eldon, Robert H	B.A., Queen's	Math., Com		1911	30	7	4,375		
	Ward, William	B.A., B.Ped., Queen's	Com		1911	27	5		3,375	
	Fletcher, William H	M.A., Queen's	Science, Com		1911	26½	4½		3,375	
	Baird, William		Com		1911	19	4		3,375	
	Conlin, Evelyn E*	B.A., Tor	Mods. and Hist		1911	19½				3,225
	Keast, Walter	B.A., Tor	Math		1916	15½	4½		3,375	
	Edward, Wesley G	B.A., Tor	Com		1911	16½	1		3,225	
	Bailey, Joseph J		Com (Int.)		1911	17	5½		3,125	
	Webster, Samuel C	B.A., Tor			1911	20	2		3,125	
	Harry, Frank T		Com		1913	8½	13½		2,975	
	Smith, Clayton R		Art, Com		1914	13	5		2,850	
	Mathieson, Elsie	B.A., Tor	Eng. and Hist		1914	11	6			2,725
	Francis, Annie B	B.A., Tor	Mods. and Hist		1915	18½	1			2,725
	Stockdale, Thomas N		Phys. Cul., Com	Art	1916	13	4		2,600	
	Hare, Arthur F		Com (Int.)		1916	8½	8½		2,725	
	Lailey, Marion B	M.A., Tor	Phys. Cul (Int.)		1916	10				2,475
	Harvey, Humphrey G (Int.)		Com		1916	5½	8½		2,600	
	Ramsay, James A	B.A., Queen's	Art (Int.), Com		1917	12½	11		2,475	
	Ferguson, W. Stanley	B.A., Queen's			1917	4½	8		2,475	
	Batchelor, Edna G	B.A., McM	Mods. and Hist		1917	4½				2,350
	Henry, Stanley Hunter	M.A., Queen's	Sci., Math. and Phys.		1918	11½			2,350	
	Atkin, Edith L	B.A., Tor	Mods. and Hist	Phys. Cul	1918	6½				2,350
	Cavell, Ernest E		Com (Int.)		1918	3½	8½		2,600	

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								Principal	Male Assistants	Female Assistants
								$	$	$
Toronto, Commerce .... (*Con.*)	Dickson, Lucy I.		Com. (Int.), Phys. Cul.		1918	3½	5½			2,225
	Bain, Mary	B.A., Tor.	Phy. Cul (Int.), Mods.& H.		1916	9				2,225
	Hampson, Edward	B.A., Queen's	Art, Phy. Cul. (Int.), Com.		1919	2½	18		2,225	
	Spence, Frank A. (Int.)		Com.		1919	2½	4		2,600	
	Davidson, Viola M.	B.A., Queen's	Art, (Int.), Science,		1919	9½	1			2,225
	Proudfoot, Rolph M. (Int.)		Com.		1920	1½	8½		2,475	
	Rae, Margaret (Int.)	B.A., Tor.	Mods. and Hist.	Phy.Cul.	1920	1½				1,975
	Carlyle, John A.	B.A., Tor., M.A., Harv.	Eng. and Hist.	Phys.Cul.	1921	12	2		2,975	
	Kenyon, Anna K. E. (Int.)	B.A., West.	Com.		1921	½	13½			2,500
	Shillinglaw, Emily (Int.)		Com.	Phy. Cul.	1921	2½	13			2,500
	Short, W. Roy (Int.)	B.A., Queen's			1921	½	8½		2,450	
	Willkinson, Mrs. Laura J.	B.A., Queen's	Phys. Cul.		1921	14				2,500
Toronto, Davenport ..	Wood, Frank H.	B.A., Tor.	Math.		1920	13		3,575		
	Halbert, Edwin J.	B.A., Tor.	Science		1920	12½	3		3,100	
	Hutchinson, John I.	M.A., Tor.	Eng. and Hist.		1920	13			3,100	
	Ketcheson, F. Blanche	B.A., Tor.	Mods. and Hist.		1920	16				3,225
	Lamb, Walter J.	M.A., Queen's	Math.	Phys. Cul.	1920	8	3		2,975	
	Morrow, John D.	B.A., Tor.	Class	Phys. Cul.	1920	25½			2,975	
	Smith, Hilda C.	B.A., Tor.	Phys. Cul. (Int.), Art.		1921	7½				2,075
	Helson, Margaret J. **	M.A., Tor.	Mods. and Hist.	Phys.Cul.	1921	4½				2,500
	Kerr, Maybelle G.	B.A., Tor.	Mods. & Hist. Phy.C. (Int.)		1921	6½				2,500
	McLellan, Robert F.	B. A., Tor.	Phys. Cul. (Int.)		1921	2½			2,200	
Toronto, North	Reed, George H.	M.A., B.Pæd., Tor.	Class		1910	33½	4	3,975		
	Shaw, Robert	B.A., Tor.	Math.		1913	20	3		3,375	
	Clark, Luther J.	B.A., Queen's	Phy. Cul. (Int.), Fr. & Ger.		1914	31½	5½		3,375	

	Keillor, James	B.A., Queen's	Eng. and Hist.		1915	30	3		3,375	
	Murdoch, William E	B.A., Tor.	Class	Phys. Cul.	1920	11½	16		3,225	
	Ayers, M. Huntley	M.A., Queen's	Science		1920	17½	8		3,225	
	Scanlon, Mary G		Phys. Cul., Art		1911	13	2½			2,725
	Kennedy, M. Isabel. . . . (Int.)	B.A., Tor.		Phys. Cul.	1919	3	½			1,975
	Allen, Mabel E	B.A., Tor.	Mods. and Hist		1920	15				2,225
	Quirk, Eric . . . . . (Int.)	B.A., McM	Math. & Phys., Phys. Cul.		1920	1½			1,975	
	Reynolds, Norman W. . . (Int.)	B.A., Tor.	Phys. Cul.		1920	1½	1		2,075	
	Langford, Howard D. . . (Int.)	B.A., Tor.	Eng. and Hist.		1921	½			2,300	
	Bale, George S	B.A., Tor.	Mods. and Hist.	Phys. Cul.	1921	21			2,500	
	Walkom, Elmer J. . . . . (Int.)	B.A., Tor.	Phys. Cul.		1921	½	1½		2,000	
	Braithwaite, George E. . (Int.)	B.A., Man.		Art, Phys. Cul.	1921	½	3		2,100	
Trenton	Whyte, Robert	B.A., Tor.		Phys. Cul.	1910	26	4	2,750		
	Wilson, James S	B.A., Tor.		Phys. Cul.	1921	5	3½		2,300	
	Powell, Mabel	B.A., Queen's	Mods. and Hist.	Phys. Cul.	1921	4½				1,800
	Hunter, Lily P	B.A., Tor.	Phys. Cul., (Int.,) Art		1921	4½				1,800
	Gillham, Estelle M		Art. . . . . (Int.)		1920	4½	1			1,700
	Little, Evelyn M . . . . . (Int.)		Art		1922	2	6			1,500
Tweed	Manning, Ernest D	B.A., Queen's		Phys. Cul.	1921	6½		2,400		
	Truscott, Edith L. . . . . (Int.)	B.A., Queen's		Phys. Cul.	1920	1½				1,600
	Quinlan, V. May		Phys. Cul. . . . . (Int.)	Art	1920	4½	1			1,600
Uxbridge	Welsh, David A	B.A., Tor.		Agr. Phys. Cul.	1917	11½	2½	2,500		
	Durnin, Letitia E	B.A., Queen's	Phys. Cul.		1921	7½	5			1,700
	Underwood, Mary L. . . (Int.)	B.A., Tor.	Mods. & Hist., Phys. Cul.		1921	1½				1,700
	Greene, Edith A . . . . . (Int.)	M.A., Tor.		Art, Phys. Cul.	1921	½				1,700
	Weatherill, Lillian			Art, Phys. Cul.	1921	4	4½			1,500
Vienna	Payette, Henry J	B.A., Tor.		Art	1921	3		1,600		
	Mark, Alfred E . . . . . (Int.)				1920	5	6		1,300	
Walkerton	Anderson, Wm. Geo	B.A., Tor.	Class., Eng. and Hist.		1920	20½	3½	3,000		
	McGregor, Margaret C	B.A., Tor.		Art	1908	14½	1½			1,800
	Sillers, Marion Roberta	B.A., Queen's		Phys. Cul.	1920	5½	4			1,800
	Mallory, Gordon H. . . . (Int.)	B.A., McM	Sci	Phys. Cul.	1921	½			2,200	
	Anderson, Beatrice E		Art, Com. . . . . (Int.)	Phys. Cul.	1921	11½	3			2,000
Wallaceburg	Dickenson, Edgar U	B.A., Tor.	Phys. Cul.		1904	17	3	2,600		
	Shaw, Ada E	B.A., Tor.		Phys. Cul.	1918	3½				1,700
	Bole, Abbie M	B.A., Queen's		Phys. Cul., Art.	1921	4½				1,700

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								Principal	Male Assistants	Female Assistants
								$	$	$
Wallaceburg... (*Con.*)	Skene, Margaret Vera..(Int.)	B.A., Tor.		Phys. Cul.	1921	1/2				1,700
	Armour, Elizabeth F....(Int.)	B.A., Tor.		Phys. Cul.	1922	1/2				1,700
	Smith, S. Louise			Art	1922	11 1/2	3			2,000
Wardsville	Farrington, Mabel C	B.A., Tor.		Phys. Cul.	1916	8 1/2		1,700		
	Williams, William...(Temp.)			Art	1922	1			1,500	
Waterdown	Spencer, W. George	B.A., McM	Math. and Phys.....(Int.)	Phys. Cul.	1921	3		2,400		
	Forester, Margaret	B.A., Queen's	Art.....(Int.)	Phys. Cul.	1921	5	7 1/2			2,000
	McDonald, Margaret D			Phys. Cul.	1921	6 1/2	1			1,800
Waterford	Rowntree, Annie E	M.A., Tor.	Phys. Cul., Mods. and Hist.		1910	11 1/2	5	2,300		
	Keough, Maggie		Art, Ho. Sci.		1921	5 1/2	5 1/2			1,700
	MacDonald, Margaret A (Int.)			Phys. Cul.	1922		7			1,700
Watford	Cameron, Murray	B.A., Queen's		Phys. Cul.	1920	5 1/2		2,600		
	Mitchell, Blanche H			Art	1907	14 1/2	4			1,700
	Walker, May.....(Int.)	B.A., Tor.		Phys. Cul.	1921	1/2				1,600
	Case, James H		Phys. Cul.		1921	15	13		1,850	
Welland	McCuaig, Herbert M	B.A., Queen's			1891	37		2,700		
	Johnson, Guy E	M.A., Queen's	Science.....(Int.)	Phys. Cul.	1920	3 1/2	2		2,400	
	Thomson, Helen M	B.A., Tor.	Math		1908	13 1/2	3			2,000
	Brennan, Jennie L		Art		1906	15 1/2	4			2,000
	Cameron, Allan A			Phys. Cul.	1921	16 1/2	3		2,000	
	Keeler, Joan.....(Int.)	B.A., Tor.	Phys. Cul		1921	1 1/2	3			1,800
	Reid, Edith L		Com., Art		1922	13 1/2	6 1/2			2,000
	Bradley, Elsie P.....(Int.)				1921		4			1,500

Weston	Pearson, Alexander	B.A., Tor.	Science	Agr., P.C., Com.	1914	28½		3,100		
	Graeb, Mabel M.	M.A., Tor.	Mods. and Hist.	Phys. Cul.	1911	13				2,000
	Jeffrey, H. G. Stirling	B.A., Tor.	Math. and Phys. (Int.)	Phys. Cul.	1919	3½			1,900	
	White, Lloyd	B.A., Queen's	Com., Phys. Cul. (Int.)		1921	3½	7		2,000	
	Found, Ada C.	B.A., McM	Mods. & Hist (Int.) Com.	Phys. Cul.	1921	5	1			1,700
	Carrie, Violet G.	B.A., Tor.	Phys. Cul.		1921	3½				1,700
	Tapscott, Lottie M. (Int.)	B.A., McM	Fr. and Ger.		1921	½				1,700
	Allen, Lillian M.	B.A., Tor.	Phys. Cul. (Int.)	Art	1922	7½				1,900
	Messervy, Grace (Int.)	B.A., Tor.		Phys. Cul.	1922					1,700
Whitby	Ireland, Norval J.	B.A., Tor.	Sci. (Int.)	Agr., Phys. Cul.	1920	2½	4	2,000		
	Gregory, Alice E.	B.A., McM	Phys. Cul., Class.		1917	4½				1,800
	Allison, Henrietta E.	M.A., Tor.	Phys. Cul. (Int.)		1921	6½				1,700
	West, John F.		Phys. Cul.		1920	2½			1,800	
	Miller, Gladys, M.		Art	Phys. Cul., Com	1920	3½	3			1,700
	Fraser, Laura G. (Int.)	B.A., Queens'	Art	Phys. Cul.	1922	1½				1,700
Wiarton	Hamilton, John R.	B.A., Queen's		Phys. Cul.	1912	12½		2,500		
	Shepley, Addie M.			Phys. Cul., Art.	1920	4½				1,700
	Cameron, Marguerite A (Int.)	B.A., Queen's	Phys. Cul.	Art	1921	½				1,700
Williamstown	Barrett, Wellington J. C.	B.A., Queen's		Phys. Cul.	1919	7½		2,300		
	Cattanach, Jessie S.	B.A., Queen's		Phys. Cul.	1910	11	4½			1,850
	Ross, Edith I.	B.A., Queen's		Phys. Cul., Art.	1920	2½				1,700
	Carroll, William I. (Int.)	B.A., Queen's	Phys. Cul.	Farm M.	1921	1½	4		2,000	
Winchester	Copeland, George E.	M.A., Queen's	Agr. (Int.), Sci.	Phys. Cul., F. M	1921	10½	3½	2,400		
	Rogers, W. Cruess	M.A., Queen's	Art	Phys. Cul., Agr.	1919	11	2½		1,550	
	Brookins, Marjorie (Int.)	B.A., Queen's	Fr. and Ger.	Phys. Cul.	1920	1½				1,300
	Rose, Maude L.			Art	1920	7½	4			1,100
	MacPhail, Mary C. (Temp.)	B.A., Queen's			1922					1,500
Wingham	Brackenbury, George L.	B.A., Queen's		Phys. Cul.	1920	9	1	2,600		
	French, Fred Wm.	B.A., Tor.	Class		1921	24½			2,000	
	Hamilton, Grace A. G. (Int.)	B.A., Queen's	Phys. Cul.		1920	2	1			1,800
	Finch, Ethel B.	B.A., Tor.	Mods. and Hist.	Phys. Cul.	1920	2½	1			1,700
	Horan, J. Cecilia		Art		1921	7½	2			1,700
	Anderson, Charles (Temp.)	B.A., Queen's			1921				1,800	

SUMMARY, COLLEGIATE INSTITUTES AND HIGH SCHOOLS, JANUARY, 1922

Number of Schools, Sex of Teachers, and Percentages

Schools

Collegiate Institutes	47
High Schools	124
Total	171
Increase for the year	3

Teachers

Men	613
Women	689
Total	1,302

Percentages

Jan.'22:	Men, 47.08;	Women,	52.91
" '21;	" 48.63;	"	51.36
" '20;	" 49.14;	"	50.85
" '19:	" 48.71;	"	51.28
" '14:	" 59.27;	"	40.72
" '09:	" 67.55;	"	32.45
" '04:	" 78.80;	"	21.20

Number of Teachers

Collegiate Institues

Principals	47
Assistants	655
Total	702

High Schools

Principals	124
Assistants	476
Total	600

Grand Total

Principals	171
Assistants	1,131
Grand Total	1,302
Increase for the year	95

Salaries

Collegiate Institutes

Highest Salary	$4,500
Average " Principals	3,356
" " Male Assists.	2,554
" " Female	2,023
Average Salary	2,359
Increase for the year	108

High Schools

Highest Salary	$4,375
Average " Principals	2,478
" " Male Assists.	2,253
" " Female "	1,786
Average Salary	$2,025
Increase for the year	182

Collegiate Institutes and High Schools

Highest Salary	$4,500
Average " all Principals	2,719
" " all Assistants	2,128
Average Salary, all	2,205
Increase for the year	138
Average Salary, Male Assis.	2,471
" " Female, "	1,900
Increase for year, Principals	156
" " Male Assistants	81
Increase for year, Female Assistants	195

University Graduates, Specialists, etc.

Collegiate Institutes and High Schools

Graduates	981
Non-Graduates	321
Graduates, Jan., 1922	75.34 per cent.
" " 1921	74.15 "
Non-Graduates, Jan., 1922	24.65 per cent.
" " " 1921	25.84 "
Interim Certificates	237
Specialists	696
Interim Specialists	270
Specialists and Int. Special's, Jan. '22,	74.19 per cent.
" " " '21,	73.81 "
Non-Specialists, Jan., 1922	25.80 "
" " " 1921	6.18 "
Elementary Certificates in Art	125
" " Physical Culture	407
" Commercial Certificates	6
" Certificate in Manual Training	1
" Certificates in Farm Mechanics	15
" " Vocal Music	2
Intermediate Certificates in Agricul. and Hort.	48

APPENDIX Y

ONTARIO SCHOOL FOR THE BLIND

ANNUAL REPORT OF THE SUPERINTENDENT

To the Honourable R. H. Grant, M.P.P.,
Minister of Education for Ontario.

Sir,—I have the honour to transmit herewith the fiftieth Annual Report of the Ontario School for the Blind, Brantford, for the year ended 31st October, 1921.

I have the honour to be,
Sir,
Your obedient servant,
W. B. Race,
Superintendent.

Brantford, December, 1921.

The Attendance

In presenting the fiftieth Annual Report of the Ontario School for the Blind, I beg to report the average attendance for the session which ended June, 1921, as 113, and an increase in the total registration for the school session commencing September 28th, 1921, from 106 to 119. The registration of pupils for the twelve months of the official year from October 31st, 1920, to October 31st, 1921, was 146, just ten more than in the preceding year.

There has been a marked increase in attendance this year at all schools throughout the Province and the School for the Blind proves to be no exception. The Canadian National Institute for the Blind co-operating in some places with the Canadian Red Cross Society and other organizations interested in the care of children, have done a splendid work in directing the attention of the public to the excellent advantages of our school.

Changes in Staff

Miss Jeannette Killmaster, owing to ill-health, was compelled to resign as Musical Director, very much to the regret of everybody associated with the school, as the work in her department had reached a very high degree of excellence. Miss Killmaster's position was filled by the appointment of Mr. J. G. Galloway, organist in the Brant Avenue Methodist Church of Brantford. Mr. Galloway is rated very highly as an organist and as a teacher of piano and vocal music.

Miss Summerby, High School Teacher, resigned owing to the illness of her mother, and has been succeeded by Miss Jean Burns of Brantford. Miss Burns is a graduate of Toronto University and comes to the school with a short experience in High School work.

Mr. Tindall, Boys' Supervisor, for one year, resigned to continue his studies, and his work in the school has been taken by Mr. John Pollock. Mr. Pollock is not without experience, as he occepied a similar position once before and has had much to do with boys' work. He is an expert swimmer and had been acting throughout the summer as life-saver for the City of Brantford.

Many of their old friends and schoolmates will regret to hear that since our last report both Miss Matura Cronk and Miss Catherine Burke have passed away. The former had been in ill-health for the last two years and her death came as a release from suffering on May 7th. Miss Burke's death occured in March and she had only been away from the school for a few months.

Miss Winnie Davison, who had been acting as stenographer in the office of the Director of the Canadian National Institute for the Blind, Toronto, succeeded Miss Burke for a few months, returning at a later date to take another position in Toronto. The position is now filled by Miss Agnes MacGillivray, a graduate of last June.

New Pupils at the Opening of the Session, September 28th, 1921

Name	Address	Name	Address
Beecham, Leslie	Toronto, Ont.	Lyon, Ross	Kingston, Ont.
Brown, Grace	London, Ont.	McCormick, George	Toronto, Ont.
Carpenter, Marjorie	Bridstow, Alta.	More, Angus	Seaforth, Ont.
Casey, Muriel	Ottawa, Ont.	Morrison, Alex.	Calgary, Alta.
Crawford, Gwendolyn	Toronto, Ont.	Morrow, Alvin	Pilot Mound, Man.
Duffet, James	Haileybury, Ont.	Pachkowski, Mike	Stonewall, Man.
Evans, Stanley	Calgary, Alta.	Pease, Gordon	Moose Jaw, Sask.
Ferens, Mike	Winnipeg, Man.	Phillpott, Emily (re-admitted)	Brockville, Ont.
Gemmell, Alex.	Simpson, Sask.	Richea, Phyllis	Toronto, Ont.
Gliddon, John	Toronto, Ont.	Simpson, Myrle, (re-admitted)	Dominion City, Man.
Grausdin, John, (re-admitted)	Lettonia, Man.	Stevens, Myrtle	Regina, Sask.
Griffin, James	Glanford Station, Ont.	Tennyson, Evelyn	Port Perry, Ont.
Harris, Robert	Leslie, Sask.	Vickers, Alice	Gamebridge, Ont.
Hayes, Emmett	Stratford, Ont.	Vallery, Alex.	Munson, Alta.
Inglis, David	Tillney, Sask.	White, William	Thorold, Ont.
Iverson, Selma	Preeceville, Sask.	Wood, Bernice	Woodstock, Ont.
Jarrold, George	Beaverlodge, Alta.	Wood, Doris	Peterboro,' Ont.
Kellar, Nicolay, (re-admitted)	Hyas, Sask.	Zeller, Lydia	Melville, Sask.

Pupils Registered in Session 1920-21

Name	Address	Name	Address
Barnstable, David	Winnipeg, Man.	Jeffrey, Gordon	Beachburg, Ont.
Barrett, Wilson	Sunderland, Ont.	Joyce, Judson	Ottawa, Ont.
Baxter, Harold	Wetaskiwin, Alta.	Konopski, Albin	Valley River, Man.
Bell, Stewart	Paisley, Ont.	Kozlowski, Joseph	Winnipeg, Man.
Bellew, Clarence	Winter, Sask.	Lott, Ernest	Wingham, Ont.
Bettridge, Edward	Brampton, Ont.	Luckett, Stanley	Edmonton, Alta.
Braden, Milton	Calabogie, Ont.	McDonald, James	Clover Bar, Alta.
Campbell, Charles	Toronto, Ont.	McLaren, Fred	Merrickville, Ont.
Carlson, Arthur	Victoria Harbor, Ont.	McLennan, John	Toronto, Ont.
Carscallen, Archie	Tamworth, Ont.	Macalister, Donald	Macalister, B.C.
Clarke, Allan	Toronto, Ont.	Macbeth, Stanley.	Toronto, Ont.
Conway, Ernest	Kirkland Lake, Ont.	Makey, Lawrence	Tillbury, Ont.
Craig, Leslie	Petrel, Man.	Martin, Joseph	Winnipeg, Man.
Culver, John	Todmorden, Ont.	Miscampbell, Lester	Angus, Ont.
Davidson, Thorstein	Prince Rupert, B.C.	Mollard, Robert	Stonewall, Man.
Duggan, Basil	Toronto, Ont.	Montgomery, Horace	Kingston, Ont.
Edmondson, Stanley	Brantford, Ont.	Mulholland, Thomas	Toronto, Ont.
Elmes, Alfred	Toronto, Ont.	Nason, Irvine	Port Arthur, Ont.
French, Clayton	Anglia, Sask.	Niece, Robert	Lowbanks, Ont.
Gash, James	Vancouver, B.C.	O'Brien, William	Peterboro', Ont.
Gilby, Norman	Bracebridge, Ont.	O'Neill, Allan	Calgary, Alta.
Greene, Edward	Dunnville, Ont.	Parfitt, Allan	Toronto, Ont.
Hackett, John	Barrie, Ont.	Patrick, George	London, Ont.
Hartfield, Adolf	Lang, Sask.	Powell, James	Toronto, Ont.
Hill, Archie	North Bay, Ont.	Petrie, Aloysius	Hamilton, Ont.
Hill, Norman	St. Thomas, Ont.	Philpott, Ernest	Brockville, Ont.
Hutchinson, Fernie	Fernie, B.C.	Philpott, Fred.	Brockville, Ont.

Pupils Registered in Session 1921-22 (Continued)

Name	Address	Name	Address
Philpott, John	Brockville, Ont.	Fuson, Dora	Swan River, Man.
Richards, Laurie	Winnipeg, Man.	Gascoigne, Marjorie	Hamilton, Ont.
Scherger, Christian	Leader, Sask.	Gill, Grace	Toronto, Ont.
Shaw, Thomas	Hamilton, Ont.	Grey, Muriel	Winnipeg, Man.
Stoddart, Ernest	Copper Cliff, Ont.	Grills, Iva	Cane, Ont.
Sutherland, Joseph	Vancouver, B.C.	Hutson, Amy	Moose Jaw, Sask.
Sydor, Mike	Winnipeg, Man.	Joyce, Patricia	Strathcona, Alta.
Troughton, Robert	Arthur, Ont.	Kingsley, Nora	Bridesville, B.C.
Tuttle, Russell	Toronto, Ont.	Krauser, Rose	Winnipeg, Man.
Warren, George	Prince Albert, Ont.	Lammie, Greta	Hensall, Ont.
Young, Kenneth	Binbrook, Ont.	McDonald, Christina	Dunvegan, Ont.
Bews, Anna	Bridgeburg, Ont.	MacGillivray, Agnes	Listowel, Ont.
Bickerton, Gladys	Navan, Ont.	Mellick, Verna	Rapid City, Man.
Brunsden, Alma	Brantford, Ont.	Michnishcodare, Eliz.	Manitowaning, Ont.
Clark, Jessie	North Bay, Ont.	O'Neill, Mary	Ottawa, Ont.
Clark, Lillian	Mount Dennis, Ont.	Reddick, Jessie	Toronto, Ont.
Clarke, Marguerite	Toronto, Ont.	Regimbal, May	Norwood Grove, Man.
Collins, Mabel	Saltcoats, Sask.	Sadeski, Mary	Souris, Man.
Crawley, Daisy	Toronto, Ont.	Sells, Kathryn	London, Ont.
Dalton, Mary	Hamilton, Ont.	Shotbolt, Kate	Sturgeon Creek, Man.
Dawson, Christina	Toronto, Ont.	Smith, Audrey	Collins Bay, Ont.
DeCarlonis, Aida	Peterboro', Ont.	Smith, Bernice	Sarnia, Ont.
Dell, Pearl	Edmonton, Alta.	Smith, Effie	Brantford, Ont.
Duciaume, Francina	Rockland, Ont.	Taylor, Mabel	Edmonton, Alta.
Dupuis, Agnes	Brantford, Ont.	Truscott, Ruth	Battleford, Sask.
Edwards, Mary	Toronto, Ont.	Waswanipi, Mary	Cochrane, Ont.
Folis, Rose	Winnipeg, Man.	Watson, Myrtle	Vancouver, B.C.
Fox, Marjorie	Georgetown, Ont.	Welsh, Verna	Baldur, Man.

Domestic Science

As intimated in my report of a year ago, the need of proper facilities for teaching Household Science was very apparent, as the poorly equipped room which has done service for many years has long been insufficient for the needs of this very important branch in girls' training. The appropriation granted for that purpose has enabled us to fit up and equip a large room with all the latest conveniences for teaching Domestic Science, and the girls feel grateful for the completeness of the accommodation now provided.

A large electric stove, in addition to several smaller stoves which stand upon separate tables enables the pupils to have all the advantages of individual training as well as demonstrations by the teacher in charge.

June Concert

As usual the June concert was quite up to, if not beyond the usual standard. At all events, the room was filled to capacity and many enjoyed the programme from the hallway outside where those who could not obtain an entrance stood throughout the entire programme.

The following is taken from the Brantford "Expositor" of June :

Those who had the privilege last evening of attending the commencement exercises of the Ontario School for the Blind, enjoyed a rare treat, and could not fail to be impressed with the varied and attractive programme that was presented. There were part songs, solos, piano solos, duets and quartettes, violin selections, recitations, wand drills and a beautiful tableau of spring. The entire programme was chaste and artistic, and splendidly rendered, and reflects great credit on the members of the staff.

The programme was varied from the succession of musical numbers by the introduction of an unusually pretty and well arranged dramatic piece called "A Spring Fantasy." There were 18 pupils taking part in this and they aroused the keenest interest among those watching them by the accuracy with which they remembered to

take their places and the general ability they showed in making the offering pretty and attractive. The little playlet was begun by a lament by old King Winter that his strength was all passing away, then his disappearance, and the arrival of Spring and all her attendants. King Winter was attended by little white snowflakes and Jack Frost, the snowflakes being chosen from the very smallest of the little girls, who carefully led each other on and off the stage, holding hands. Spring had her followers also, in dainty and bright flower costumes, and in dance and song and dialogue they told the story of the change of seasons. The whole production was very pretty and showed careful training on the part of the teachers, for some of those taking part were very small, yet their voices carried to all parts of the hall.

An interesting number was a recitation given by a very small lad, Ernest Philpott, who had a voice much "bigger" than his body, and he was distinctly heard in his selection, "David's Soliloquy." Donald Macalister was loudly applauded also in his selection, "The Cattle Thief," by Pauline Johnson, and a wand drill by seven boys was given with the precision of a small corps of drum majors.

The major part of the programme, however, was given over to musical numbers. This year at the school there are several young ladies who have given excellent promise of becoming widely known in their art, for they have inherent musical talent, and their teachers have given them very special attention. Several times during the year they have appeared on other platforms in the city and have been welcomed, and again last night they gave excellent account of themselves.

Miss Kathryn Sells has become familiar in every way with her piano, and with her own natural ability and careful study she has attained a high degree of perfection. She played last night Rachmaninoff's "Prelude in G Minor" that displayed her gifts very well, for she played it with confidence and finish. Miss Gladys Bickerton sang "Romanza" (Cavellerio Rusticana) and her fresh young voice was well displayed in her selection, when she took the high notes clearly and resoundingly and put a good deal of artistry into her lower tones. In her violin solo, "Reverie," by Vieuxtemps, Miss Greta Lammie gave a number that was a decided favorite with her audience and she was warmly applauded.

Very well given were the part songs by the girls' choral class and the two numbers of the boys and girls in one large chorus, with which the programme was opened and closed, "A Twilight Song" and "Now Tramp O'er Moss and Fell." A very sweet and pleasing number was a solo sung by Miss Agnes MacGillivary and the "Boat Song" by Miss Lillian Clark proved to be a very pretty selection. Several young ladies entertained the audience by their piano numbers, Miss Lilian Clark and Miss Kathryn Sells playing a piano duet, Miss Mary O'Neill pleasing with her piano solo, "On Song's Bright Pinions" and the piano quartet, Mozart's "Euryanthe" was very fine as played by Miss Mary O'Neill, Miss Agnes MacGillivray, Miss Alma Brunsdun and Aloysius Petrie. A number given by two violinists, a pianist and an organist was delightful, Miss Greta Lammie, Miss Jones. Miss Kathryn Sells and Aloysius Petrie taking part in this. The number of those who possess musical ability was further shown by the piano duet played by the Misses Mary Edwards and Aida de Carlonis, who both proved to be talented.

The whole entertainment was of a high order and Principal W. B. Race, who welcomed the visitors to the school and introduced the pupils, was justly proud of their work. The skill with which the pupils move about the stage still excites the interest and the curiosity of the audience, and Mr. Race is making it a special feature to instruct the boys and girls to make their way alone.

One of the most pleasant features of the programme was the presentation by Mr. W. B. Donkin, on behalf of the pupils, of a beautiful lamp to Rev. Mr. Martin, for his interest in coming to the school on more than one occasion to give them a dramatic recital.

Visitors

Mr. L. M. Wood, President of the Canadian National Institute for the Blind, was a welcome visitor at the time of the June concert. Mr. Wood in addressing the pupils referred to his interest in the adult blind at Toronto and expressed a keen appreciation of the work done in the school, not only in their education and work, parts of which he had witnessed, but also in the magnificent concert they had given.

Mr. Philip Layton and Mrs. Layton, of the Montreal School for the Blind, were also welcome visitors. They each spoke to the pupils, emphasizing the value of their training at school, and giving them much good advice.

New Walks

During the summer vacation many improvements were made in the grounds. New walks were built which enable the boys to reach their dormitory without entering the Main building, and trees which were obscuring the main building were cut down, much to the general improvement in appearance and with the additional advantage of affording more light to the rooms. Numbers of trees were cut down in the grounds and a large patch of willow which had been growing unchecked for several years was cut out altogether.

Concerts During the Vacation

Several of the girls undertook in various parts of the province to put on concerts during the summer months, and I am glad to report that they met with considerable success. These concerts educate the public to the high quality of the work being done, and serve as a good advertisement to the school, and also afford some return to the girls for the entertainment given.

INFORMATION FOR PARENTS

The following information regarding the aims and objects of the School will be of especial interest to parents who are considering sending their children :

Where It Is—What It Is—What It Does

The Ontario School for the Blind was established in 1872, and formally opened in May of that year. The site overlooks the valley of the Grand River, and includes one hundred acres of valuable land. The opportunities afforded to the pupils and other residents of the school for healthful recreation are more than usually ample. No school for the blind in either Great Britain or the United States will compare with this one in that regard. The school is greatly favoured, too, by being within the limits of the City of Brantford, one of the most enterprising in the Province. The city cars pass along St. Paul's Avenue at the entrance to our beautiful park, and radial lines pass on either side in the direction of Paris and Galt. The interest taken by the churches in the welfare of the pupils, the frequent intellectual and musical entertainments to which the latter have access, and the healthful, moral and social conditions generally, all act most favourably on the lives and characters of the young people thus brought in contact with them.

The school was founded for the purpose of imparting general education, as well as instruction in some professional or industrial art to all blind youths of both sexes, between the ages of seven and twenty-one, not being deficient in intellect, and free from disease or physical infirmity. It is not intended as an asylum for the aged or infirm, nor as a hospital for the treatment of disease; but in its design has reference only to the physical, mental and moral training of blind children.

It is required that all pupils sent to the school should be decently and comfortably clothed, and furnished with a sufficient change and variety of apparel to ensure cleanliness and comfort. A supply sufficient for the term must be furnished or guaranteed before the pupil can be admitted.

The regular session commences on the fourth Wednesday in September, and continues until the third Wednesday in June, at which time every pupil must be removed to his or her home or place of abode. Guides are provided where necessary at the beginning and the end of the school term to look after the safety of children when they are travelling, but parents wishing to have their children with them at the Christmas vacation are expected to make all arrangements for the journey, both going and coming, and to guarantee that they will not be exposed to any contagious disease.

No fee is charged for tuition or board, but parents must pay all travelling expenses to and from school.

Terms of Admission

The term "blind person" is liberally interpreted to mean those who, by reason of actual blindness or impaired or defective vision, are incapable of receiving instruction in the Public schools. As a matter of fact, about half the pupils have some perception of objects, and have come after trying unsuccessfully to wrestle with the ordinary work of a school for the seeing. In many cases pupils come whose eyesight is in a critical condition from the strain imposed upon it by endeavouring to keep up with seeing pupils.

Pupils are admitted between the ages of seven and twenty-one years, but the rule is flexible enough to be disregarded if in the opinion of the Principal an individual case warrants an exception being made. But pupils must be free from bodily infirmity or mental deficiency.

The Course of Instruction

The courses of study followed in the Ontario School for the Blind are exactly the same as in the Public Schools of the Province, with the single exception of art. Pupils enter, however, at such a variety of ages that our system must be flexible enough to adapt itself to circumstances. Those who have had a previous training in the first grades of the Public School are given a test and placed in the class for which they are best fitted. But the child of seven or eight years who is attending school for the first time will receive his first lessons in the Kindergarten class, where he will learn all the little handy arts taught in the public Kindergarten schools, such as weaving, sewing, plaiting, and modelling familiar objects in clay. Here he gets his first ideas of music in the Kindergarten songs. Then his physical powers are developed systematically by exercises in a well-warmed and well-ventilated gymnasium. He will devote a short time daily to learning arithmetic, in its elementary stages, and also be taught to read. Arithmetic is rendered easy by use of blocks or other objects, and the alphabet is mastered by the aid of embossed cards. In this way a clever child will, at the end of a session, surprise his friends by the progress, in reading by the touch small words or even sentences, he has made.

As the pupil progresses he will take up new subjects of study in each class. Among these geography, taught by the aid of raised sectional maps, will be one of the most interesting. On these maps our own Province, with its counties, lakes, rivers, railways, cities, towns, etc., is carefully studied. The Dominion, with all its political divisions and geographical features, is mastered. Great Britain, with its commercial centres and other characteristics, is made perfectly familiar to the young pupils; while the United States and the Continents of Europe, Asia, Africa

and America, are all handled in turn on the same principle. That geography can be most successfully taught objectively is admitted. Many are the envious looks cast by public school teachers at our maps.

Natural history is taught with the aid of stuffed birds, animals, reptiles and fishes. The laws of hygiene are thoroughly impressed upon the minds of the pupils, which naturally tends to the development and maintenance of a robust and vigorous physical condition.

Blind pupils will, in all essential particulars, hold their own with the highest class in the public schools, while it is probable that they will really have a more complete acquaintance with certain subjects than their seeing competitors, and if a student has higher literary aspirations with a distinctively practical object, he can prepare himself here by fully qualified teachers for University Matriculation.

Music

There is a mistaken impression that the blind are gifted with musical talents to a greater extent than the average of seeing persons. But, as a matter of fact, there is nothing in blindness to quicken musical perceptions. Music is, however, a study particularly adapted to the blind, provided that the pupil has an ear that may be trained, and a musical sense that may be developed and cultivated. Remarkable results are attained, too, from the concentration of the mind on the study, which is easier to a blind person than to a seeing one. Every pupil in the school who can be taught music to reasonable advantage has the opportunity. But to expect us to make an accomplished musician out of a pupil merely because he is blind is absurd. Pupils of our school have passed very creditably the difficult examinations of the Toronto Conservatory of Music and the University of Toronto. Many are reaping the reward, as organists and music teachers, of the instruction they received at our school. That instruction includes the pipe organ, piano, theory, violin, and vocal music, and where the accomplishment is not complete enough to enable the pupil to follow it as a vocation in life, it at least contributes to the pleasure and joy of life, and it is just as important to make people happy as to make them money earners, and music is a powerful agent to that end. Where without such qualifications a blind man or woman might spend a dreary life in listless idleness, he or she may in this way attain a social position many sighted ones will envy.

Blind pupils are taught music just as are seeing ones, by note and by practice. They play just as deftly and correctly as those who have the best vision. The notes are taught in the ordinary way. Then the exercises are dictated by the teacher to the pupil, who writes them in a cipher, consisting of raised dots made with a stylus on stout paper, and so arranged as to constitute the several musical signs. These are read by touch, and the pupil practising at the piano reads with the one hand while he practises with the other, right and left alternately, so that either hand in turn serves for the eyes, and the piece is committed to memory and played over until the teacher is satisfied it is played correctly. Examinations are held annually in both the literary and musical departments by gentlemen of the highest reputation in the respective professions, and the results are fully conveyed to the parents.

Typewriting

All well-organized Schools for the Blind make provision for instruction in the use of the typewriter. It supplies the pupils with a convenient means of correspondence very superior to the pencil and grooved card, and its use teaches

accuracy and precision in writing and spelling. The use of the dictaphone renders it unnecessary for those who wish to become typists to depend upon shorthand notes, and several of our girls have become quite expert.

Piano-Tuning

Special attention is paid to piano-tuning, as this vocation is one in which the blind can always excel, and they compete with seeing tuners on equal terms. One can become an excellent tuner without becoming a thoroughly successful pianist, although it is always urged that those who wish to become tuners should become proficient players, for reasons that are obvious. There are altogether thirty-five pianos in the school, as well as an excellent pipe organ, and pupils are taught to understand the mechanism of the instruments. All the pianos used are repaired in the school, and the pupils have the benefit in this way of learning from their instructor much about the structure of the instrument and the execution of such repairs as a tuner is expected to undertake. Pupils graduating from the tuning department receive a complete outfit of tools and a certificate vouching for his qualifications. Many are filling remunerative positions throughout the province.

Manual-Training

Under the supervision of an expert instructor the boys are given the same opportunity at manual training as is found in the Public and High Schools, and it is really remarkable how expert they become in the use of tools and in the construction of different articles of woodwork. Cane chair-seating, too, is soon learned, and many of the smaller boys take delight in exhibiting their skill in this respect in their own homes, where the work can be done with little inconvenience. Broom-making is also taught, and as brooms are a necessity in every household, lucrative employment has been found for those who select this form of handiwork But even to those who do not, or are not likely to go permanently into a workshop, there comes such an insight into mechanical methods as may be useful to them in after life.

The Sewing Classes

Under the watchful supervision of a skilled and patient teacher, the girls, whether they choose to adopt music as their profession or not, must follow an outlined course of instruction in sewing. The faculty of passing spare moments delightfully, and of entertaining others with music, vocal or instrumental, is by no means to be depreciated. But the usefulness in the family circle will be complete if, in addition to a delightful accomplishment, the homlier ones of sewing, knitting, fancy-work, and cooking are available, and all these are obtainable by our pupils. Both hand and machine sewing are taught, and not only plain sewing, but every form of work for which the ingenuity of the inventor has supplied an "attachment" to the sewing machine.

Knitting and Fancy Work

The classes in knitting and fancy work afford a rather wider scope for earning money than does the former branch, however useful in a domestic sense the art of sewing may be. The girls buy their own wools, and under the guidance of their teacher, they make knitted articles of every description, which find a ready sale. Many execute orders for friends, who are glad to pay a fair price for the articles. At the great exhibitions on this continent and in Great Britain, both our sewing and knitting room specimens of work have been most favourably commented on.

The Cooking Class

This class is not designed for turning out what are known as professed cooks. To that distinction the most ambitious of our pupils does not aspire. But no one will deny that, as effecting the health and comfort of the family, cookery takes a first place, and if the blind daughter can cook the dinner, set the table, and wash up the dishes while her sisters mind the store or teach in the school, and the mother performs her numerous matronly duties, the blind girl will be a treasure, and this is what we wish all our blind girls to be.

Our classes in cooking are provided with every facility for acquiring a thorough knowledge of domestic science in all its phases.

Physical Culture---Gymnasium

Given the most healthful surroundings, it is universally admitted that the blind youth needs something more. The robust excercises in which seeing youths indulge and which go so far to develop the muscle and give a tone to the whole system, are almost altogether beyond the reach of the blind. The tendency of blindness is to limit physical exercise and to acquire a generally inactive habit. This manfests itself by a desire to sit down and pass away in idleness moments that could be used with profit to the health and physical development. A well-equipped gymnasium helps to overcome this, and this advantage in our school has a most marked beneficial result. Well warmed and ventilated, the gymnasium can be used at all seasons, and is a splendid place for recreation, even when not needed for systematic instruction. The classes assemble at fixed periods as part of the regular curriculum, and are put through their several exercises according to the perfectly scientific method. In addition to this there are opportunities for recreation out of doors. Slides and swings are provided for both boys and girls, and a running track with wires, to which rings are attached by ropes, enable the pupils to run as fast as their legs will carry them without fear of stumbling or getting off the beaten track.

Club Rooms

The boys' club room is fitted up with tables and comfortable chairs, to which they repair at stated times for such games as dominoes, checkers, bagatelle, in all of which they take a great interest. The girls, too, have a sitting-room, in which they have a piano, and many happy moments are spent there after the classes for the day are over, and on holidays.

How the Day is Spent

A brief sketch of the daily life of the pupils will be interesting. The day begins with the ringing of the large bell at 6.30 a.m. That is the signal for every one to be stirring. Pupils must rise, and, after dressing, make their own beds, although some of the smaller boys and girls are unequal to the task, and in the case of others, a certain amount of "tidying" is necessary. Breakfast is at 7.30 after which all pupils must take a morning walk over a prescribed route. At 8.30 the bell summons to the Assembly Hall. The attendance of all is obligatory on this occasion. The National Anthem is sung to the accompaniment of the pipe organ, after which necessary announcements are made by the Principal, and the news of the day in brief is given. The pupils always take a keen delight in this resumé of the morning paper, for it keeps them in close touch with current events, and their information is quite up-to-date. A few records from the best artists are then placed on the victrola, or perhaps a selection is played on the player-

piano, and the day is thus started with the melody of sweet music. The Roman Catholics then retire to a separate room, where a service is conducted by officials of their own communion. For the others, the service conducted by the Principal consists of hymn singing, Bible reading and prayers. At 9 o'clock the literary, musical, sewing and knitting classes commence, continuing, with an intermission of fifteen minutes, until a quarter to twelve. Dinner is at 12, and classes are resumed at 1.30, continuing until 3.30 or 4 o'clock, when nearly all are at liberty. Supper is at 5.30. At 7 o'clock the very young pupils go to bed, the older ones going to the Assembly Hall for evening reading from the best standard literature available. Letters are then read to the pupils or written for them, and the intermediate pupils retire to the dormitory at 8.30. The older pupils, who in the summer time walk about the grounds, or in the winter play games in their club-room, retire for the night at 9.30. On Saturday the younger boys and girls are taken for walks or down town to make purchases, and the older pupils are permitted to go out alone, those who have a slight degree of sight accompanying the totally blind. On Sunday, after the opening prayers, the pupils attend Sunday School classes for an hour in the school, after which everybody goes to church, old and young, under the care of their teachers, the denominations chiefly represented being Anglican, Methodist, Presbyterian and Catholic.

So it will be seen that life in the school is a busy, active life, very different from what the imagination often pictures, and altogether the reverse of that which the blind child or youth is condemned to pass at home. It may safely be affirmed that, allowing for all the defects incidental to their various conditions, and often the lack of an early training it would be hard to find any body of young people in this Province more happy, lively, intelligent and self-respecting than the pupils of the Ontario School for the Blind.

Domestic Arrangements

The ground floor is devoted to class-rooms, business offices, reception room, etc. etc. On the floor above are teachers' sitting-rooms, and clubrooms, practice rooms and library. On the third floor is the large Assembly Hall, with its comfortable opera chairs, its fine pipe organ, and a commodious stage. On the same floor is also the hospital, elaborately equipped, in charge of a well-qualified trained nurse, whose duty it is to take care of those who are sick. In the rear annex are the dining-rooms, domestics' quarters, kitchen, store-rooms and bakery, while beyond these again are the engine-rooms and laundry. The boys' and girls' dormitories are on opposite sides of the main building. In these are to be found the very latest appliances. There are twenty-two rooms in each building for the pupils, each provided with three beds, three clothes closets, and one bureau with three large and three small drawers. The doors are numbered in brass tack point print. Besides the two stories on which the sleeping rooms are located, there are a basement and an attic, with rooms for storage, and every precaution has been used to make the buildings fireproof. In the basement are two large rooms fitted up with shower baths and tub baths, while on the bedroom floors there are several wash-rooms and lavatories which would be a credit to the finest hotel on the continent.

The manual training room is a large separate building, as is also the building where piano-tuning is taught. At a short distance from the main building are the houses of the Superintendent and Bursar. The engineer occupies the lodge house at one of the entrances to the grounds. With two or three exceptions the

officers reside on the premises. The general management devolves upon the Superintendent, while the Bursar attends to all financial matters and the purchasing of supplies. The Matron has entire charge of the domestic departments. In addition to the trained nurse there are also two thoroughly competent nurses, one for the boys and one for the girls, whose duties are to look after the clothing and to report to the head nurse, if necessary, any cases of illness which should go to the hospital.

The dietary is a very generous one, quite equal to that of any high-class boarding school, if not superior to most. The pupils have a hot dinner daily, with dessert and as great a variety as can be desired. At the same time the pampering of the appetite is discouraged, and pupils so indulged, as is often the case at home, soon learn to enjoy the plain but plentiful and wholesome provision made for them. Watchfulness over the pupils' health and prompt treament in case of sickness are further secured by a daily visit from the school physician, and once a year at least a well-qualified eye specialist makes an examination of all the pupils' eyes. In addition to this, a thoroughly competent dentist takes care of the teeth of every pupil attending the school.

Correspondence

Pupils may correspond with their friends as often as they please, and once a month it is obligatory on them to do so. On that occasion the postage is provided by the school. All letters received for pupils are supposed to be opened by the Superintendent and handed by him to the respective officers on duty to be read to the receivers. The strictest confidence is observed in regard to he contents of such letters. Money remitted for pupils is placed in the hands of the Bursar, and it can be drawn out when required. This method avoids the risk of money being dropped or lost, with the disagreeable results such accidents are likely to entail.

Vacation

The regular annual session commences on the fourth Wednesday in September, and continues until the third Wednesday in June. Previous to the summer vacation all parents or guardians are notified of the place and hour at which the pupils may be expected to arrive. A similar notice is sent when the pupils reassemble. A guide usually accompanies every party of pupils to their destination. The railway companies grant special rates for the round trip on very liberal terms. It is cause for profound satisfaction that since the school's existence no accident attended with bodily injury has ever befallen a travelling pupil. The care taken by the guides and the very kind and thoughtful attention of the railway officials, who take a friendly interest at all times in the blind traveller, have conduced doubtless to their immunity from harm and danger.

Visitors

Visitors desirous of inspecting the work and methods of the school are welcomed at any time during school hours, and conducted through the building by an attendant. Saturdays and Sundays, however, are closed days. Pupils' friends and relatives are entitled to visit them whenever they please, but the school cannot undertake to provide accommodation for parents whose homes are at a distance.

Inspection and Control

The school is under the direct supervision of the Minister of Education. To him, as the representative of the Government, all the officials are strictly responsible. It is the wish of all connected with the school that everything should be

done to enhance the comfort and happiness or aid the progress of the pupils, and thus strengthen the school in the confidence of the public. All applications for admission, or information, should be addressed The Superintendent, Ontario School for the Blind, Brantford.

Date of School Opening

The term will re-open Wednesday, September 27th, of this year (1922), and the attention of the parents is drawn to the fact that pupils should not be permitted to return to the school without an adequate supply of clothing. It is not to be expected that sturdy boys and girls can go through the school year from September till June with only one suit of clothes and one pair of boots.

The following list is intended to draw attention to the articles of clothing needed, and it is also urged that each article be *plainly marked* so that there will be no danger of loss in the laundrey:

Girls' List

All articles to be marked with name, and all to be in good condition.

4 Middies.
2 Skirts, dark and of good quality.
1 Sunday dress.
3 Undervests.
3 Pairs of drawers.
2 Dark petticoats.
1 Light petticoat.
3 Night dresses.
3 Pairs of stockings.
1 Pair rubbers.
2 Pairs of shoes.
1 Cap.
1 Pair of gloves for winter.
Comb and Brush.
Tooth Brush.
Kimona
6 Handkerchiefs.
Slippers.
Extra shoe laces.

Boys' List

All articles to be marked with name, and all to be in good condition.

1 Suit for Sunday.
2 Extra pairs of pants.
1 Overcoat.
2 Light blouses (to be made with collar and waist band).
2 Dark blouses.
3 Suits of underwear.
6 Pairs of stockings or socks.
2 Pairs of boots.
1 Pair of rubbers.
2 Night shirts.
2 Sweater coats.
Suspenders.
1 Pair of mittens.
Neckties.
6 Handkerchiefs.
1 Comb and Brush.
1 Tooth Brush.
2 Caps.
2 Wash cloths.
Extra shoe laces.

PHYSICIAN'S REPORT

Hon. R .H. Grant, M.P.P.,
Minister of Education for Ontario.

Sir:

I beg to submit my report as physician at the School for the Blind for the year ending October 31st, 1921.

The session was an unusually fortunate one from the standpoint of epidemics or serious illnesses. The one exception was the loss by death of Miss K. Burke.

During the year she was forced by ill-health to leave the school. She died later with a member of her own family. She was an officer of some years' standing and was held is very high esteem by officers and pupils alike.

One pupil was operated on successfully for appendicitis during the year.

In September the pupils came back in good general condition. A few days later, however, two cases of Diphtheria developed.

These were successfully treated at the Brantford General Hospital.

Notwithstanding the comparative freedom from serious illnesses, there is naturally a continuous chain of minor ailments among the pupils that require daily attention.

I want to express my endorsation of the faithful and efficient work done by Miss Wright as head of our Hospital ward.

Respectfully submitted,
J. A. Marquis.

Brantford November 15, 1921.

REPORT OF MUSICAL INSTRUCTION

To The Honourable R.H. Grant,
Minister of Education.

Sir:

I have the honour of presenting my report on the Musical Department of the Ontario School for the Blind.

The examinations to which this report refers were conducted on Wednesday and Thursday, June 8th, and 9th.

The subjects included were, Piano, Solo-singing and Voice culture, Class singing, Theory of Music, Violin, and Piano and Harmonium Tuning.

The Piano Class, although smaller than in previous years, still maintains the high standard of the past three years. Six pupils gained honours and seven passed; one candidate who took the teachers' examination of Professional Standard passed a good examination in practical pedagogy.

Much credit is due to Miss Killmaster and her assistants, Miss Smyth and Miss Howell for these excellent results.

In solo-singing the pupils as a whole gave a very intelligent reading of their selected pieces and studies, and their tone quality was unusualy good.

Several Juniors passed well; one intermediate gained Honours, and one pupil who reached the licentiate standard sang with much refinement and artistic feeling.

The choral class, conducted by Miss Killmaster, who is assisted by Miss Howell is a district credit to the school.

The performance of several part-songs was marked by Beauty of Tone, clarity of Diction, and expression that was not exaggerated in any way. The rendering of Sir Henry Bishop's glee, "Now tramp o'er Moss & Fell." Solo and Chorus, was very delightful.

The Violin class, under Miss Jones' direction is promising well, but at present is only in the elementary stage—with one exception.

This Senior Violin Student performed several pieces, displaying good tone and attack, excellent bowing and intelligent phrasing.

In the Theory of Music, six pupils passed in Rudiments, three obtaining high honours.

I venture to hope that in the coming session, Harmony, History and Musical Form will be taught to all students in the higher grades of Piano, Violin, Organ playing and Singing. These subjects are absolutely essential to all who wish to excel and to specialize in Instrumental or Vocal Art.

Piano and Harmonium Tuning and Regulating—The teacher of this important class is Mr. Ansell, who is an expert tuner. A class of some twelve pupils are doing excellent work under his guidance.

The pianos in the school are now in good condition and this is due to the fact that Mr. Ansell and his class of youths are responsible for the tuning and repairing of all the instruments.

It is interesting to note that, during the past few years, a number of pupils from the Tuning class have obtained good employment in Toronto and other important cities. One student is holding a post of some responsibility in China.

I have much pleasure in offering my testimony as to the capabilities and general work of Mr. Ansell in his capacity as Tuning Master to the O. S. B.

I noted with much satisfaction that the Braille system of point print is now being used practically throughout the School. This is an important step in the right direction. I was again much impressed by the attitude of the children during prayer, and by their excellent Hymn-singing at morning service, conducted by the Principal, Mr. W. B. Race.

In conclusion I would offer my congratulations to the Principal and to his assistants of the Music Faculty on the progress that has been made in Music generally during the past year.

I have the honour to be, Sir,
Yours obediently,
ALBERT HAM.
Mus. Doc. F. R. C. O.

Toronto June 9, 1921.

OCULIST'S REPORT

To The Hon. R. H. Grant,
Minister of Education.

Sir:

I have the honour to report the results of the Examination of the Pupils' eyes for the year 1921.

A larger number of new pupils than usual were examined for the first time this year.

Condition of Sight

	Males.	Females.	Total.
1. Without perception of light in either eye.	1	1	2
2. Perception of light in one eye, none in the other	4	6	10
3. Perception of light in both eyes	4	2	6
4. Limited objective vision in one eye	2	1	3
5. " " " " both eyes	11	3	14
	22	13	35

Particular attention was given to the degree of sight possessed by each pupil entering, as well as a careful revision of some of the pupils of former years because it is generally felt that the special method of education given at this school ought not to be applied to those who might even with some difficulty and special attention obtain their education at a public school or at a so-called sight-saving school. A few were found who in my opinion might in their own interest better retire.

Diseases Causing Blindness

	Males.	Females.	Total.
Optic Atrophy	5	1	6
Ophthalmia Neonatorum	2	4	6
Injury to one eye followed by Sympathetic Opthalmia in the other	4	—	4
Cataract	2	1	3
Retinitis Pigmentosa	1	2	3
Poorly developed nerve.	1	1	2
Microphthalmus	1	1	2
Myopia	1	—	1
Hyperopia	1	—	1
Injury to both eyes	1	—	1
Interstitial Keratitis	1	—	1
Keratitis and Iridiocyclitis	—	1	1
Buphthalmus	1	—	1
Persistent Hyalmoid Membrane	1	—	1
Measles	—	1	1
Scarlet Fever	—	1	1
	22	13	35

Again I have to call attention to the large number rendered blind by injury to one eye followed by Sympathetic Opthalmia in the other eye, and the sight of all these eyes is very bad, as it is also in the unusually large number entering this year blind from Ophthalmia Neonatorum. It is possbile I am in error in diagnosis of some of these last because ignorance or wilful suppression of the history of such cases makes is necessary to fall back on clinical appearance only.

It became necessary to remove one eye during the term, but beyond that the eyes and ears of the pupils gave very little trouble from acute conditions. It might be worthy of note that one pupil had a cataract removed by Col. Smith, of India, This had been thought inoperable but Dr. Smith made a successful extraction. The results however connot be estimated as yet.

Respectfully Submitted,
B. C. Bell.

Brantford, Ont., Nov. 19th, 1921.

LITERARY EXAMINER'S REPORT

To the Hon. R. H. Grant, M.P.P.,
Minister of Education for Ontario.

Sir:

Herewith I submit my report as Literary Examiner at the Ontario School for the Blind, for 1921.

Organization and Management

The same organization prevails as prevailed last year. Mr. Cole and Miss Summerby conduct the High School Classes and the Public School Classes are in charge of Mr. Cole, Mr. Langan and Misses Lowry, Moffitt, MacGuire and Patterson.

The curriculum is essentially the same as that laid down by the Department for Provincial schools. The school is classfied on a six grade basis rather than an eight, and the course of study modified accordingly.

High School Classes

The same subjects are being taught as reported last year, and the curriculum is essentially the same. The arrival of books in Braille and of some instruments is making the work more satisfactory. I was particularly pleased with the work in all the classes and especially so in Literature, Physics and Geometry.

Public School Classes

The same arrangement of classes and curricula exists as last year. Mr. Cole and Miss Summerby take Entrance work with the Fourth Book Class. The class was well advanced and some will undoubtedly be advanced into the High School this year.

Mr. Langan is in charge of Third Book class, which has made considerable progress. Mr. Langan is an active teacher and has vindicated my prediction of last year that his usefulness would increase with his experience.

Miss Moffitt is in charge of a class embracing Senior Second and Junior Third work. The same high class of work prevails in this class this year as was mentioned last year.

Miss McGuire is in charge of a First and Second Book class, which also covers some History, Hygiene and Nature work. Miss McGuire is doing very efficient work and readily secures the interest of her pupils.

Miss Lowry has charge of a Primary class and a few First Book pupils. Miss Lowry is doing excellent work and secures splendid results from her pupils. The pupils in this class begin to write Braille.

Miss Patterson is temporarily in charge of the Kindergarten-Primary class. Kindergarten boards and pegs are used for instruction in Braille. Number facts to nine are learned and simple addition and subtraction. The usual Kindergarten work such as weaving, sewing, folding, clay modelling and raphia work is conducted. This class being the Junior one of the school, and containing pupils that have entered at various times during the year, is necessarily less uniformly graded than the other classes, and the work is of a more individual character.

Manual Training Work

Mr. Donkin has, as usual, a fine display of Manual Training work, such as book racks, lamps, trays, hall trees, cabinets, desks, flower stands, etc. Considerable attention is being given to cane work, which appears to me as being well suited for blind pupils. The usual broom making is still carried on.

Miss Haycock exhibited many fine specimens of the work of the girls in Knitting, and Crocheting. Interest in this work is shown by the fact that one pupil, during the war, made over 600 pairs of socks.

Miss Cooper has a practical course in Sewing, and Cooking, which is much appreciated by the girls, although carried on in poorly furnished quarters, which are much too small. I am pleased to learn from Principal Race, that a well-equipped Household Science room is to be provided during the coming year.

Miss Burden has a very efficient class in Typewriting. The pupils acquire great speed and accuracy. Work was done from the Dictaphone.

General Remarks

(1) The organization, classification and equipment is better than formerly.

(2) Owing to Miss Summerby being absent through illness, I was unable to see her teaching, but judge from the work of the pupils that it is very efficient.

(3) Mr. Race deserves great credit for having secured a staff of such efficiency and one that works so harmoniously.

I have the honour to be, Sir,
Your obedient servant,
E. E. C. Kilmer.

Brantford, June 11, 1921.

How shall Parents Manage Their Blind Children in their Early Years at Home and how Bring them up?

If you have a blind child, consider that God has given it to you to be tended with unusual love and care. If you give it proper care and it lives to grow up, it will be a capable and happy human being, who will fill its place in life and will bring comfort to you. But if, on the contrary, you neglect or spoil your child, it will then be a poor bit of humanity, a burden both to you and to itself. Hence attend to the following rules:

1. Treat the blind child exactly as if it were a seeing child, and try as early as possible to make it put its body and mind into action. As soon as it begins to use its hands give it toys to play with. Talk to it, sing to it, and give it toys that make a noise, to attract its attention and arouse its mind.

2. Teach the child to walk at the age when seeing children learn.

3. Do not allow the child to sit long in one place alone and unoccupied; but encourage it to go about the room, in the house, in the yard, and when older, even about the town. Teach it to know by touch all objects around it.

4. As soon as possible teach the child to dress and undress, to wash itself, to comb its hair, to take care of its clothes, and, when at table, to use properly spoon, fork and knife. A blind child can do all these things as well as a seeing child; but you must give it much practice in doing them; because it cannot learn by observation.

5. Watch carefully the child's personal appearance. It cannot see how others act, and so readily acquires habits which are disagreeable to its companions. Some of the most common mannerisms of blind children are rocking the body, twist-

ing the head about, sticking the fingers into the eyes, distorting the face, swinging the arms, stooping and hanging the head in walking and bending over in sitting. As soon as you observe such practices in your child, you shoud make a vigorous attempt to break them up; for, if they once become habitual, years of schooling may be unable to overcome them.

6. Permit the blind child to play as much as possible with seeing children, and to romp often with them out of doors. Frequently take the child walking, and direct it in some simple physical exercise. If it is obliged to sit still, you should at least give it balls, pebbles, blocks, a doll, a harmonica, or such other toys as appeal to touch and to hearing.

7. If you would inform your child of the world about it, you must let it touch all the objects that you can get at, and must teach it to appreciate space and distance by actual measurements. To cultivate its sense of touch, let it handle familiar objects, like different woods, plants and coins.

8. Allow the child to take part as early as possible in household duties. Allow it to string buttons or shells; to shell and pick over beans, peas and nuts; to clean furniture and kitchen utensils; to wash dishes; to grind the coffee; to peel potatoes; to gather the fruit in the garden; to feed the hens, doves, dog, cat and other domestic animals. You can also occupy the child pretty well in easy handiwork, such as winding yarn, braiding the hair anl in course knitting.

9. Speak with your child much and often, for, since it cannot read the loving care which is written on your face, it has special need to hear your voice. Ask the child frequently what it hears or feels, and induce it to ask many questions as to what is going on around it.

10. Take care what you say before your child; for the blind child is more attentive to all that it hears than the seeing child is, and for this reason retains it better.

11. When in the presence of your child, never indulge in expressions of pity for its blindness, and suffer no one else to do so. Such expressions can only discourage and depress the child. Rather seek to encourage it and keep it engaged in happy activity, in order that it may strive cheerfully and courageously to be independent later in life, and to do without external consolation and assistance.

12. Give the child occasion to exercise its memory. A good memory will later be found invaluable. Have it commit to memory such proverbs, short poems, and stories as it enjoys.

13. The blind child's moral and religious nature can be developed just as early as the seeing child's.

Meeting of the Alumni Association

The Alumni of the Ontario School for the Blind held their second conference on June 20th, 21st, and 22nd, and all declared that it was, if possible, an even greater success than the reunion two years ago.

The Boy Scouts of the Salvation army met every incoming train and escorted the arriving guests to the waiting motors of members of the Brantford Kiwanis Club, who in turn brought them up to the school. Each new arrival registered his name and paid a fee of one dollar upon entering the building, and was then greeted by old friends. Many were the happy groups wandering here and there

about the grounds and buildings, or sitting under the trees and enjoying the renewing of old ties. As Mr. Raymond, later on, quoted from Abe Lincoln, "Our friendships are more than half of our existence," and few friendships are so enduring as those formed in school.

Some of the members present had been pupils in the school in 1872, notably Mr. Askelon Leppard, and his brother Mr. Sanford Leppard, of Toronto, the latter of whom kept up a steady stream of pleasantry during the whole of the proceedings. Mr. F. W. Johnston, who was elected President of the first convention, carries on an extensive Mail Order business in Toronto, and is deeply interested in the Canadian National Institute for the Blind.

Among the well-known musicians present were Mr. Charles Duff, of Niagara Falls, a gifted organist and pianist with a special "flair" for accompaniments. Mr. Herbert Treneer, who is a student at Knox College, plays the organ acceptably there and in Oshawa. Mr. Albert Kaiser, who has a big sonorous voice, and led in much of the singing, is a tuner in the Bell Piano Factory at Guelph, and Miss Gladys Thompson, of Toronto, who has a sweet soprano voice, did much to make the gathering an enjoyable one.

The first formal meeting was held on the evening of the 20th, with about one hundred members present. The Rev. Mr. Easton, of St. Andrew's Presbyterian Church, gave the invocation and Superintendent W. B. Race delivered an address of welcome to which the President, F. W. Johnston replied.

Mr. Johnston struck the keynote of optimism in his statement that blindness should not be considered an affliction, but only a handicap, and the whole tone of the conference was in harmony with that idea.

He hoped that all had come to the reunion first, of course, for pleasure, but also to advance the welfare of the blind. He spoke of Mr. Stewart, of Montreal, who had lost his sight through an accident when sixteen years of age, and yet who was not discouraged, but had gone on through school, through McGill University, had taken up a law course, studied French law for a year, and was now one of the shining lights of the bar in Montreal. Mr. Fraser, a friend of his family, was responsible for this success, because of the encouragement he had given.

A great deal could be done by the blind themselves to help along the work of the Canadian Institute for the Blind. In this wonderful organization there were nine distinct activities carried on by the adults as follows: (1) The work of the Head Office itself. (2) The Library, containing 9,000 volumes, with a membership of 725. (3)The Broom-Shop. (4) The Men's Industrial Department for Vocational Training. (5) The Women's Industrial Department. (6) Clarke-Wood, the Women's Residence. (7) Pearson Hall, where blinded soldiers were instructed. (8) The Sales Department, through which the blind could find a market for the work they were doing at home. (9) A Normal Department, where teachers are trained to carry on home teaching.

Lastly Mr. Johnston dwelt on the subject of getting about alone, referring to a member of the State Legislature in Oregon, now campaigning for membership in the state senate, and he had never used a stick.

The evening closed with an impromptu concert. Mr. Albert Kaiser took the piano and soon all were singing, "When you and I were young Maggie," and other old songs. Mr. Kaiser sang alone, Mr. Duff gave an organ solo. Miss

Squair recited a humourous selection on Committee work, Mrs. Ratcliffe gave a recitation, Mr. Treneer gave a fine vocal solo, followed by several selections by others as they were called upon by the audience, all who could responding readily, and being given an enthusiastic reception.

Next morning at nine o'clock the session opened with an address by W. G. Raymond, at that time Postmaster of Brantford, but now member of Parliament for South Brant, and one of the most distinguished of the ex-students of the School. Mr. Raymond spoke of the favourable circumstances surrounding the present meeting, the longest day in the year, in the most beautiful month of the year, in the garden county of the banner province of the wonderful Dominion of Canada. Then with a smile he told of how every county in England claims to be the "Garden County," of meeting at last an Englishman who had mentioned coming from Surrey, without claiming that it was the garden county. But within a few minutes someone had asked what was the garden county of England, and he had answered promptly, "Why, Surrey, of course."

Mr. Raymond then spoke feelingly of the death since the last Alumni meeting of Mr. Roger Roberts, whose generous, fine, and noble nature had won him many warm friends. Here it was he quoted Abe Lincoln's words, and expanded the theme of the large part paid by friendship in our lives.

Next he brought forward the suggestion that the year, 1922, be made the occasion of the Jubilee celebration of the founding of the Ontario School for the Blind, fifty years before. He then proceeded to outline the progress made since that time, and ended with some words of appreciation of the work of the present principal and staff.

The next speaker was Mr. Joseph Burns, of Minden, whose plain tale of his life was full of human interest. It was a story of misfortunes staunchly met and hardships bravely overcome. Though totally blind he is a successful farmer and the father of a family of eight girls and five boys.

He left the Ontario School for the Blind in 1895, and for some time made baskets at home and did other odd jobs. The winter of 1896-7 had been a time of depression, and in order to make a little money he and two others had undertaken a contract for getting out lumber. The next day the other two had thrown up the job, but he had stuck to it and carried it through.

No one who heard the story will ever quite forget his account of the day he sat on a biscuit box in front of the grocery store that had refused him credit, and had put his head down in his hands and wondered what would become of him. He was married at the time and trying to pay for a farm until sickness and misfortune had reduced him to dire straits. The merchant seeing his despair pressed a two dollar bill upon him which he uncomprehendingly accepted.

A few moments reflection, however, brought him to a sense of the real meaning of the act and returning into the store he handed the money back, refusing gratefully what seemed too much like charity. Next day the grocer told him he could have all the credit he needed, so impressed was he by the incident, and so convinced that such a spirit should be encouraged. From then on matters had bettered themselves, until now he was quite on his feet.

Mr. Swenerton, Manager of the sales Department of the C.N.I.B., in Toronto, lost his sight in the war, and is the "cheer up man" of Sir Arthur Pearson's book, "Victory over Blindness," that is to say, he was given the task of going from hospital to hospital to bring comfort and courage to the newly blinded soldiers there. He gave an interesting address on his present work.

Mr. Albert Lott, of Brussels, is one of the Alumni who is taking a University course. He expects to receive his degree from Queen's University and then to enter the Methodist Ministry. He gave a modest and straightforward account of his struggles and defeats and triumphs, claiming that as he had no extraordinary ability anyone could do as well as he had done.

The afternoon session opened with an address by Mr. S. C. Swift, M.A., Librarian for the blind in Toronto. He took as his subject "The Limitations and Possibilities of Blindness," and treated it in an unusually interesting manner. "If thou canst believe, all things are possible" he quoted, and took this stimulating thought for his text. Physical blindness does not imply any deficiency in ability or in the qualities of true manhood. Cicero said he had a blind teacher of geometry who could draw a line as straight as he could himself. Homer was blind, if we could believe tradition. In all ages blind people had entered into remarkable walks of life.

In 1891 for instance, a noted blind sculptor did several famous bronze pieces in France. The present chaplain of the United States was blind. A former pupil of the school, Arthur Barnard, now in Edmonton, had his M.A., and B.D., degrees, and occupied a chair in Church History. Dr. Babcock, of Chicago, the author of a valuable work on diseases of the heart, a book now used in Canadian Universities, was blind. Another younger medical man was on the Chicago Public School medical staff. There were many successful salesmen among the blind.

Mr. Swift went on to prove that almost every line of activity is open to blind people. But with all this success, intellectual force figured itself forth in physical form, and there must be some limitation, if not in quality then in quantity of work done. The real leap that a blind man might take depended most of all on attention. If a man's attention were clean and healthy and well-directed, he would attain success, he would avoid becoming a dreamer. The speaker advocated advanced education for every person, even if he had to come back to manual labour afterwards. The limitations of blindness were social, intellectual, and economic, and he was of the the opinion that every person who had been blind twenty years was somewhat abnormal, which came from the fact that all sighted people live in a totally opposite way to the blind. No matter how it appeared otherwise, he said, the blind were not received into the hearts, confidences and homes of other people. People also found it hard to believe that the blind could do things as well as normal people; if anything were placed on the market as well-made as if done by a sighted person, it raised the whole status of the blind of the community, and on the other hand one blind beggar on the street did more harm to the struggle for emancipation than a dozen successful men could overcome. One last thought was to remember that every blind person was a missionary who had to "save" the Macedonian public from their error in regard to the blind.

Miss Nesbitt, of Walkerton, gave a very refreshing little talk on her experiences as a child and later. She is richly gifted with the saving grace of humour, which has helped her over many hard spots in life. That and a resolution she made in early years never to refuse to do anything that was asked of her, have made her life rich, full and happy, in spite of her hardship. On leaving school she had gone to her home in the country, where she had tried to work up a music class. It was slow, hard work, but after trying her prentice hand on her younger brother, she was convinced she could do it. She coaxed from

her father permission to use the old white horse, which her younger brother drove for her, and in due time she worked up a good-sized class. She told with much humour the story of the day the old white horse had buried himself in a snow-drift, and of how they had to extricate him. But this did not daunt her. Neither did the request that she take charge of a large Sunday school infant class, or later a class of young girls, all of whom had become her personal friends. She acknowledged having had many secret misgivings at times, but she did not allow them right-of-way, and in every case her courage has been amply justified.

Miss Ethel Stevens, of Peterboro,' was unable to come, and her paper was read for her. Her subject was "Home Teaching," and was treated in a very practical and concrete way. She said she watched the papers to find possible employment for any of her pupils, and sometimes did find it in the most unlikely forms, such as canoe caning, for example. Her work was as varied as the individuals she visited. One lad she had trained to go about on the streets alone; one man over seventy years of age she had taught to read, and for others she wrote letters or did other necessary services.

President Johnston here remarked that he hoped the time would come when there would not be a single blind person in Canada who would not be reached by the home teachers who were now being trained in the Canadian National Institute for the Blind.

Mr. J. B. Leaney, of Port Dover, struggles under the double handicap of total blindness and a growing deafness that necessitates the use of an electrical device for magnifying sound. But in spite of these, he has with almost incredible patience and fortitude won his way to a competence, and better still, to the genuine respect and affection of all who know him. In May, 1887, two years after leaving the Ontario School for the Blind, he had opened a small candy business, with a capital of $13.95 in cash, a show case and a pair of scales. Since then it had been a story of steady increase in business and growing prosperity. He had used hand power at first for making the ice-cream, then had utilized his delivery horse for the same purpose, and had finally installed a gas engine, and has spent much time and patience in learning all about the latter, until he could manage it entirely himself and make any necessary repairs unaided. He has now a good confectionery store and bakery in Port Dover, and, by the way, was so kind and generous as to have sent over several gallons of his best ice cream as a treat to all the guests at the Convention just before their departure for home.

A paper on Osteopathy written by Dr. Parke, of Midland, was read in his absence and much appreciated by the doctor's former school companions. Dr. Parke is not the only graduate from the school who has made a successful practice in the field of Osteopathy.

The Committee on Resolutions brought in the following resolutions which were moved by Sanford Leppard, seconded by S. C. Swift, and approved:

THAT WE, the members of the Alumni Association of the Ontario School for the Blind, in Convention assembled under the hospitable roof of the old School, desire to place on record our appreciation of the fact that the School has now entered upon its Year of Jubilee, having been first opened for instruction on 1st of May, 1872.

AND THAT, whereas, since that date, marvellous progress has been made in all directions by the Dominion and particularly by the Province of Ontario in educational matters, we wish to express our appreciation of the progress that has been made in the important matter of the education of the blind. We observe great improve-

ments in all departments; in the grounds and in the various buildings in everything that tends to the care, comfort and health of the pupils. Great strides have been made in the equipment for musical and technical instruction of the different kinds undertaken at the School.

AND THAT, there has been marked improvement not only in the educational, musical and technical instruction, but that the domestic training and social status of the pupils have recently reached an advanced stage that was undreamt of in the earlier years of the Institution, and this, we believe, is a very important part of the education of the pupils who are to take their place in the sighted world as useful men and women. There is a congenial atmosphere of happiness, cheerfulness, content and loyal obedience to constituted authority, such as exists in few schools, and in nowhere more than in the O.S.B.

AND THAT, we desire to place on record our appreciation of the work of the members of the excellent teaching staff whose untiring efforts have contributed so much to the real and practical success of the School.

AND THAT, we consider it was a fortunate day for the pupils of the School and for the blind of the Province when the present Superintendent was selected to guide the destinies of the School and with them the fortunes of its scholars. He has shown himself the possessor of those rare qualities of heart and brain that are requisite: judgment, firmness, sympathy, keen interest in the work in which he is engaged and whole-souled devotion to the ultimate success of the pupils. And that the happy results which we have been so much pleased to observe have been mainly brought about through the efforts of Superintendent W. B. Race, B.A., and Mrs. Race, M.A., to both of whom we express our warmest appreciation and heartfelt gratitude, and hope that a kind Providence may long grant to them both, health, strength and happiness.

Resolution No. 2:

Whereas, for many years philanthropic individuals and organizations interested in the welfare of the blind have, in many parts of the civilized world, devoted much time, thought and money to the improvement of the conditions under which the adult blind have been obliged to live and work; and,

Whereas, though the education of the young blind of Canada was first undertaken as early as the year 1861, by Father Rousselot in his institution since known as the Nazareth School for the Blind at Montreal, and has since been extended and developed to a large and commendable extent by the establishment of important schools for the blind in other parts of the Dominion—the cause of the adult blind has, until recently, received little but sporadic and individual attention; and,

Whereas in the late world War with the great toll of blinded soldiers it took, among whom were many Canadians, the consideration of the questions of the care and training of these gallant men was made of capital importance by governments and peoples throughout the civilized world, resulting in the organization of such splendid educational institutions as the famous St. Dunstan's Hostel for Blinded Soldiers and Sailors in London, England; and,

Whereas the attention thus given to the needs of these blinded soldiers has extended to the condition of the adult civilian blind; and,

Whereas, to endeavor to satisfy and systematize the needs of, and activities for our Canadian soldier and civilian blind, the Canadian National Institute for the Blind was organized and chartered in 1918, under the laws of the Dominion of Canada; and,

Whereas, the said Institute has already justified itself by its fruits and has brought hope and happiness to great numbers of the blind of Canada of both sexes and both classes herein mentioned; and,

Whereas, the major activities of the said Institute have been confined to the Province of Ontario, and have, therefore, reached and benefited more of the blind of that Province than of any other, among which beneficiaries are found many of the former pupils and graduates of the Ontario School for the Blind; and,

Whereas the Alumni, past and future, will be directly interested and concerned in the continued success and developmnt of the said Canadian National Institute for the Blind; be it therefore,

Resolved, that the Alumni Association of the Ontario School for the Blind, in reunion assembled do officially and earnestly endorse the work and the policy of the said Institute on behalf of the adult blind of the Province of Ontario; and do further thank the Government of the Province of Ontario, for its far-sighted and generous financial assistance extended to the said Institute and for the steady confidence and support given to the work it has thus far so successfully carried on; and further be it

Resolved that copies of these resolutions be forwarded to the Premier of Ontario, the Minister of Education and the Provincial Treasurer.

The following officers were elected in open meeting:

President, ...Sanford Leppard;
1st Vice-President, ...Elizabeth Nesbitt;
2nd Vice President, ...Herbert Treneer;
Secretary-Treasurer, ...W. B. Donkin;

Before leaving for their homes the members of the Association expressed their warm appreciation of all who had contributed to their comfort and pleasure during their visit to the officers of the school, to the members of the Kiwanis Club, and to the Boy Scouts of the Salvation Army.

Among the maids and helpers, boxes of chocolates were distributed lavishly and everybody voted the gathering to be a huge success in every sense of the term.

Ontario School for the Blind

I. Attendance each official year since the opening of the School

——	Male	Female	Total
Attendance for portion of year ending 30th September, 1872	20	14	34
" for year ending 30th September, 1873	44	24	68
" " " 1874	66	46	112
" " " 1875	89	50	139
" " " 1876	84	64	148
" " " 1877	76	72	148
" " " 1878	91	84	175
" " " 1879	100	100	200
" " " 1880	105	93	198
" " " 1881	103	98	201
" " " 1882	94	73	167
" " " 1883	88	72	160
" " " 1884	71	69	140
" " " 1885	86	74	160
" " " 1886	93	71	164
" " " 1887	93	62	155
" " " 1888	94	62	156
" " " 1889	99	68	167
" " " 1890	85	69	164
" " " 1891	91	67	158
" " " 1892	95	70	155
" " " 1893	90	64	154
" " " 1894	84	66	150
" " " 1895	82	68	150
" " " 1896	72	69	141
" " " 1897	76	73	149
" " " 1898	74	73	147
" " " 1899	77	71	148
" " " 1900	77	67	144
" " " 1901	72	66	138
" " " 1902	68	70	138
" " " 1903	67	64	131
" " " 1904	68	66	134
" " " 1905	67	74	141
" " " 1906	71	76	147
" " " 1907	72	72	144
" " " 1908	71	68	139
" " " 1909	72	70	142
" " 31st October, 1910	77	67	144
" " " 1911	76	61	137
" " " 1912	69	55	124
" " " 1913	62	62	124
" " " 1914	65	59	124
" " " 1915	70	62	132
" " " 1916	82	61	143
" " " 1917	74	53	127
" " " 1918	75	51	126
" " " 1919	77	51	128
" " " 1920	81	55	136
" " " 1921	87	59	146

II.—Age of Pupils for the year ending 31st October, 1921

	No.		No.		No.		No.
Five years.	0	Eleven years.	16	Seventeen years.	12	Twenty-three years.	2
Six "	1	Twelve "	0	Eighteen "	13	Twenty-four "	1
Seven "	8	Thirteen "	16	Nineteen "	3	Twenty-five "	2
Eight "	6	Fourteen "	13	Twenty "	4	Over twenty-five "	0
Nine "	8	Fifteen "	19	Twenty-one "	5		
Ten "	8	Sixteen "	7	Twenty-two "	2	Total	146

III.—Nationality

	No.		No.
American	1	Indian	3
Austrian	3	Irish	9
Canadian	59	Italian	2
English	42	Norwegian	1
Finlander	1	Polish	4
French	4	Russian	3
German	3	Scotch	8
Icelandic	1	Welsh	2
		Total	146

IV.—Denomination of Parents

	No.		No.
Anglican	38	Methodist	33
Baptist	6	Presbyterian	34
Christian Science	1	Roman Catholic	27
Congregational	1		
Lutheran	6	Total	146

V.—Occupation of Parents

	No.		No.
Accountant	1	Machinists	4
Barbers	2	Magistrate	1
Bookkeepers	2	Merchants	6
Bricklayer	1	Miller	1
Cabinet Makers	2	Millwright	1
Carpenters	5	Miner	1
Carters	2	Musician	1
Clerks	5	Painter	1
Clergyman	1	Paper Maker	1
Confectioners	2	Pedlars	2
Craneman	1	Pipe Fitter	1
Dentist	1	Printer	1
Electrician	1	Policemen	2
Farmers	32	Railway Employees	8
Fireman	1	Salesman	1
Foreman	1	Sawyer	1
Fishermen	2	Soldiers	3
Gardeners	2	Stamper	1
Hotel Man	1	Stove Mounter	1
Hunter	1	Tuner	1
Janitor	1	Weaver	1
Laborers	39		
		Totals	146

VI.—Cities and Counties from which pupils were received during the official year ending 31st October, 1921

City or County	Male	Female	Total	City or County	Male	Female	Total
County of Addington	1	....	1	County of Perth	1	1	2
District of Algoma	....	1	1	" Peel	1	....	1
City of Brantford	1	3	4	City of Peterboro'	1	2	3
County of Bruce	1	....	1	County of Renfrew	2	....	2
" Frontenac	....	1	1	" Russell	....	2	2
" Glengarry	....	1	1	" Simcoe	3	....	3
" Grenville	1	....	1	City of St. Thomas	1	....	1
City of Hamilton	1	2	3	" Toronto	12	8	20
County of Haldimand	2	....	2	District of Timiskaming	1	....	1
" Huron	3	1	4	County of Welland	1	1	2
" Kent	1	....	1	" Wellington	1	....	1
City of Kingston	2	....	2	" Wentworth	2	....	2
County of Lambton	....	1	1	" York	1	....	1
" Leeds	3	1	4	Alberta	9	6	15
City of London	1	3	4	British Columbia	5	2	7
District of Muskoka	1	....	1	Manitoba	13	10	23
" Nipissing	3	3	6	Saskatchewan	9	5	14
County of Ontario	2	1	3				
City of Ottawa	1	2	3	Totals	87	59	146
County of Oxford	....	2	2				

VII.—Cities and Counties from which pupils were received from the opening of the School until 31st October, 1921

City or County	Male	Female	Total	City or County	Male	Female	Total
County of Addington	1	....	1	County of Haliburton	2	....	2
District of Algoma	10	6	16	" Halton	7	3	10
County of Brant	10	8	18	City of Hamilton	24	23	47
City of Brantford	17	14	31	County of Hastings	6	6	12
" Belleville	4	1	5	" Huron	15	13	28
County of Bruce	10	12	22	City of Kingston	8	4	12
" Carleton	2	2	4	County of Kent	11	8	19
" Dufferin	2	1	3	" Lambton	20	8	28
" Dundas	3	3	6	" Leeds	18	5	23
" Durham	4	4	8	" Lanark	4	4	8
" Elgin	7	6	13	" Lennox	4	1	5
" Essex	15	22	37	" Lincoln	3	3	6
" Frontenac	5	5	10	City of London	15	11	26
" Glengarry	8	2	10	County of Middlesex	10	13	23
" Grenville	3	2	5	District of Muskoka	4	4	8
" Grey	11	12	23	County of Norfolk	11	10	21
City of Guelph	4	5	9	City of Niagara Falls	..	1	1
County of Haldimand	6	5	11	District of Nipissing	10	8	18

VII.—Cities and Counties from which pupils were received from the opening of the School until 31st October, 1921—Concluded

City or County	Male	Female	Total	City or County	Male	Female	Total
County of Northumberland	6	9	15	County of Stormont	5	2	7
" Ontario	9	14	23	City of Toronto	91	58	149
City of Ottawa	27	4	31	District of Thunder Bay	1	....	1
County of Oxford	8	14	22	County of Victoria	9	2	11
District of Parry Sound	3	....	3	" Waterloo	13	6	19
County of Peel	4	2	6	" Welland	9	6	15
" Perth	5	11	16	" Wellington	11	8	19
" Peterborough	15	7	22	" Wentworth	10	11	21
" Prince Edward	7	2	9	" York	21	17	38
" Prescott	2	2	4	Province of Quebec	5	1	6
" Renfrew	9	6	15	Alberta	11	8	19
" Russell	6	4	10	British Columbia	11	4	15
District of Rainy River	1	1	2	Manitoba	21	20	41
City of St. Catharines	3	2	5	Saskatchewan	13	10	23
" St. Thomas	4	2	6	United States	1	1	2
" Stratford	3	1	4				
County of Simcoe	13	11	24	Totals	651	481	1132

VIII.—Cities and Counties from which pupils were received who were in residence on 31st October, 1921

City or County	Male	Female	Total	City or County	Male	Female	Total
Addington	1	....	1	County of Renfrew	2	....	2
District of Algoma	....	1	1	" Russell	....	2	2
City of Brantford	1	2	3	City of Sarnia	....	1	1
County of Frontenac	....	1	1	County of Simcoe	3	....	3
" Haldimand	2	....	2	City of Toronto	12	8	20
City of Hamilton	2	2	4	District of Timiskaming	1	....	1
County of Huron	1	....	1	County of Welland	1	1	2
City of Kingston	2	....	2	" Wellington	1	....	1
County of Leeds	3	1	4	" Wentworth	2	....	2
City of London	1	2	3	" York	....	1	1
District of Muskoka	1	....	1	Alberta	7	4	11
" Nipissing	3	3	6	Manitoba	12	8	20
County of Ontario	2	2	4	Saskatchewan	8	4	12
City of Ottawa	....	1	1				
County of Oxford	....	1	1	Totals	70	47	117
" Peel	1	....	1	....	....	....	....
City of Peterborough	1	2	3				

Maintenance Expenditure for the year ending October 31st, 1921

Compared with the previous year.

Service	Expenditure Year ending October 31st, 1920	Expenditure Year ending October 31st, 1921
	$ c.	$ c.
Medicine and Medical Comforts	307 60	290 42
Groceries and Provisions	11,973 49	9,935 90
Bedding and Clothing	220 35	421 50
Fuel, Light and Power	12,274 26	15,622 90
Laundry Soap and Cleaning	595 33	1,129 96
Furniture and Furnishings	1,043 76	1,199 97
Farm and Garden	1,450 11	1,105 57
Repairs and Alterations	1,115 17	1,150 89
Advertising and Printing	727 10	732 89
Books, Apparatus and Appliances	1,114 86	1,172 04
Pupils' Sittings in Church	200 00	200 00
Y. M. C. A. Memberships	100 00	100 00
Rent of Hydrants	160 00	160 00
Water Supply	591 72	297 66
Inspection of Literary and Musical Classes	200 00	200 00
Oculist—Care of Eyes	150 00	171 00
Dental Inspection—Care of Teeth	136 00	150 50
Musical Instruments, including Typewriters	663 00	89 40
Repairs to Pianos and Organs	57 31	77 98
Hardware, Paints and Oils	589 44	734 55
Workshop—Tools and Material	1,506 83	1,279 59
Engineer's Supplies	510 89	486 12
Models and Outfits	169 67	71 55
Contingencies	2,279 56	2,516 00
Salaries	44,864 86	46,180 86
Travelling Expenses	.....	137 63
	$83,001 31	$85,614 88

Our Expenditure for the year ending October 31st, 1921		$85,614 88
Returned to the Department in the way of Casual Revenue	$11,163 69	
Amount charged for Perquisites	3,400 50	
		$14,564.19
Actual cost of Maintenance		$71,050 69
Average attendance		113
Average per capita cost per year		$628 76

Certified correct,

G. H. Ryerson,
Bursar.

October 31st, 1921.

APPENDIX Z

ONTARIO SCHOOL FOR THE DEAF

ANNUAL REPORT OF THE SUPERINTENDENT

To the Honourable R. H. Grant, M.P.P.,
Minister of Education for Ontario.

Sir:

I have the honour to submit for your consideration the annual report of the Ontario School for the Deaf for the year ending October 31st, 1921. In presenting this report I am pleased to be able to state that the work of the school for the year was satisfactory and good results obtained.

The Attendance

The average attendance during the session of 1920-21 was 245, and that for the preceding session of 1919-20 was 241, which shows an increase of 4 over that of the previous session. The number on the roll at the close for the summer vacation in June was 239. Of this number 21 did not return to school in September. At the re-opening in September 268 pupils were present and on October 31st this number had increased to 270. This number will likely be further increased during the year by the return to school of pupils detained at home through illness and it is expected that the average for the year will be over 270. As a consequence of such a large attendance two additional classes were formed in September, making 24 classes in all with a staff of 25 teachers. It is expected that a further large increase of pupils will take place next year and that additional teachers will be required.

In this connection, I desire to thank Mr. Cowles, Provincial School Attendance Officer, for the very valuable assistance given us in locating and getting into the school many of these new pupils.

New Main Building

The portion of the new main building which has been under construction for some time is now nearing completion. It is well, substantially and, I believe, economically built and when completed will be one of the most modern school buildings of the Province and for utility the equal of any school for the deaf anywhere.

The present structure consists of offices and twenty-one school rooms with rest and recreation rooms, etc. When completed there will be thirty-three school rooms, sufficient it is hoped to provide for the greatly increased future attendance which is even now in evidence. The remaining school rooms, the assembly room and the dining room should be proceeded with, without delay, as the needs are great and the prolonging of building operations has an upsetting effect on the work of the school.

The Farm

The yield from Ontario farms during the past season was not up to the average and fell very much behind the yields of the bumper crops of the previous years. Our farm, as with the others, did not produce up to expectations, still the yield was good and perhaps above the average for this district. With the exception of potatoes, it supplied practically all our vegetables, an abundant supply of apples, most of our small fruits and eggs and an abundant supply of milk.

The milk produced during the year was 51,663 quarts, which if purchased at say 10 cents per quart, would have cost us $5,166.30. The milk is obtained under the best sanitary conditions and the abundant supply along with that of fresh eggs, fruit, etc., makes the farm a valuable adjunct to the school equipment and gives to at least most of our children a food supply superior to that attainable at home.

The Expenditure

In considering the expenditure for the year 1920-21 account must be taken of the fact that it was late, perhaps nearing the last quarter of the year, before the reduction in prices of supplies was obtained to any appreciable extent. As a consequence, the reduction in the cost of food supplies was not great for the year and there was practically no reduction in the other classes of supplies.

The total expenditure for the year was $137,786.91 and for the year 1919-20 it was $132,221.36 showing an increase of $5,565.55. The revenue for the year was $11,171.44 and that for 1919-20, $10,066.57 showing an increase in revenue of $1,104.87. In addition to this increase in revenue there were 1,000 tons of slack coal valued at $8,870.00 on hand over that of the previous year. Therefore, while the total expenditure shows an increase, the net expenditure showed a decrease of $4,409.32 notwithstanding the very large increase in salaries, due largely to the increase in teachers' salaries and to salaries of additional teachers. In the present year, 1921-22, while no decrease can be looked forward to in salaries, the great reductions in the prices of many commodities will enable us to hope for another and considerable decrease in the cost of supplies and further reduction in the net expenditure of from $5,000 to $10,000 without in any way impairing the efficiency of the service.

Higher Education for the Deaf

During recent years, and especially the last two or three years, great advances have been made in Canada in educational ideals and methods. In Ontario the age of compulsory attendance has been raised and provision has been made or is being made to establish consolidated schools and district high or continuation schools, to enable, even compel all children, both urban and rural, to secure an education considerably in advance of that provided by the ordinary public schools both in the academic subjects and in practical training.. All of which is most commendable. But no provision is being made to give similar advantages to the deaf children, although their need is greater, as is set forth in the following editorial in *"The Canadian,"* the paper published at the Ontario School for the Deaf:

"The standard of deaf education in Ontario, and we presume in all the provinces, as throughout the world, has greatly advanced in recent years, the requirements in this School for successful graduation being the equivalent of the High School Entrance examination. But such an ultimate standard is obviously too low. As far back as 1911, in his Annual Report, the Superintendent of the Ontario School advocated the establishment of a High School course for both technical and academic training, but like so many other important projects, the matter was left in abeyance during the period

of the war. But the time has surely arrived in the development of our educational work when Canada should provide adequate facilities for more advanced education of her deaf children. Quite obviously boys and girls handicapped by deafness, who have to make their way in the world in competition with hearing children, should have at least as good educational advantages; it would be quite fair to say that they have a greater need for a good education than have children possessing all their faculties. But it is a fact that nowhere in Canada can a deaf child at present obtain more than an ordinary public school education, except that two boys of outstanding ability and aptitude for language have been able to pass through the High School and successfully take up the University course. Barring these exceptional cases, a deaf child who wants to get more than a public school education must go to the United States for it, as a number of Canadian deaf children have done, graduating with honors in most cases. The cost of doing this, however, is beyond the means of nearly all the deaf, and in any case Canada is abundantly able, and should be very willing to provide the necessary facilities for at least a High School course for all deaf children desiring it.

It would be needlessly, in some cases prohibitively expensive to have such a school in each province, and even if otherwise feasible the attendance in most of the provinces would be too small to justify the outlay necessary to enable the work to be carried on with a reasonable degree of efficiency. Until the population of Canada is much greater than at present, the only satisfactory scheme would be to establish one such school, to be open to the pupils from every province, the cost of establishing the school, and of tuition, which should be free, to be borne by the Dominion Government, and the cost of board to be defrayed by the pupil, or by the province from which he comes.

Higher education for the deaf is not a new idea, but on the contrary, as indicated above, has been in successful operation in the United States, and in some other countries, for many years. As early as in 1864 Gallaudet College was opened, which takes up both preparatory work similar to our High School matriculation course, and also University work, having been given degree-conferring powers by Congress. This College is largely supported by the Federal Government and is open on equal terms to students from all States of the Union. So the Government of the United States, by its encouragement and assistance to higher education of the deaf, has established a precedent which our Federal Government might well follow—must follow if Canada is not to lag far behind in so important a work and so imperious a responsibility."

Training Teachers of the Deaf

Provision is also being made to provide better training for teachers of hearing schools, especially in technical work, as witness the technical training schools already established and others that are projected; also various summer school courses that are available for teachers. But nowhere in Canada is any adequate provision being made for training teachers for the deaf, the most difficult of all educational work. *The Canadian* speaks as follows of the need of such a training course:—

"There is no other function of the state more important than that of providing adequate educational facilities for its children, and this includes not only suitable buildings and equipment, but also efficient and properly trained teachers. To such adequate educational facilities every child is equally entitled; and, quite obviously, the more a child is handicapped by any defect, such as deafness, the greater its need for a good education, and the greater the state's responsibility towards it.

"In order to give the deaf children the best possible education, competent teachers must be available, but it is a fact, almost incredible though it may seem, that no adequate provision is made in Canada for the training of teachers for this important work, probably the most difficult to acquire and efficiently carry on of all kinds of educational work.

"All the provinces, at a very considerable expense, now provide Normal Schools, and Schools of Pedagogy, for training teachers of hearing children, Ontario alone having eight of these schools. Such a course is deemed essential if we are to have efficient teachers, and no one questions the wisdom of such provision, or begrudges the cost. But if special training is needful for the teachers of hearing pupils, it is obviously much more essential for teachers of the deaf. An untrained teacher might do passably well in a hearing school, for all his experience as a pupil has given him a fairly good insight into the methods and processes of teaching normal children. But a new teacher of the deaf has had no such helpful experience, and is quite incompetent at the start, in fact has no idea how to make a start, especially in oral work, if left to her own devices.

"The psychology and mental processes of the deaf differ much from those of hearing children, so the methods of instruction employed must be radically different, especially during the first few years in school, even in instruction in language. But this, difficult though it is beyond what can be imagined by anyone who has had no experience in this kind of work, is yet relatively easy. It is the development of speech which is the most difficult part of the work, particularly in the lower grades; and to be able to do this successfully requires expert knowledge and a long course of study and training on the part of the teacher. Hence the obvious and very great need for a special training course for even normal trained teachers with successful experience in public school work, before they can become efficient teachers of the deaf. At present such special training can not be obtained in this country, so that any Canadians who wish to qualify as teachers of the deaf must go abroad for the necessary course—surely a condition of affairs that should be no longer tolerated in this country. It is true that in this School we carry on a pupil-teacher training course, and a very efficient one too, as probably do other Canadian schools, but this is quite a different proposition. Such teachers come as novices in the work and of course cannot acquire efficiency till they have been here for three or four years, no matter how capable they may otherwise be. Obviously the results obtained under such a system must be very considerably inferior to what they would have been if the incoming teachers had previously taken a thorough teacher-training course, and so were prepared to do efficient work from the beginning; but it is impossible under present conditions to secure trained teachers any place in Canada.

"We understand that a project is now being considered, and will probably materialize, for the establishment at Ottawa or some other central place of a training school for technical teachers for all of Canada, under the joint auspices of the Dominion and provincial governments. So the time is opportune for also making provision for a training school for teachers of the deaf, which is quite as important in its sphere, and fully as much needed, as a technical training school or our Normal Schools. Such a school, of course, could be carried on successfully only in conjunction with a regular school for the deaf, in order that the teachers in training can have the necessary observation and practice work.

"At present there is no need for more than one such training school in Canada. The number of teachers required in any one province is not sufficient to justify establishing a training school for that province only. If there were one such school for all of Canada, a competent professorial staff could be employed and the work carried on much more efficiently and economically than could be done by each province separately. In fact the expense would be insignificant, as any good existing school plant would provide all the facilities required, except two or three extra normal teachers. This system would also result in the standardization of deaf education throughout the Dominion, and would very materially increase the efficiency of such education by providing a reserve of fully qualified teachers to fill all vacancies as they occur.

"Moreover, such a training school would have marked and very desirable economical results. When the vacancies that inevitably occur in some or all the various schools for the deaf in Canada are filled with untried and untrained teachers, the work in those classes cannot be efficiently carried on, so the pupils must either spend a longer time in school, or receive a less thorough education. It is quite safe to say that a ten-year course in a school where none but previously fully trained teachers are employed would produce as good results, other things being equal, as a twelve-year course in a school where all vacancies must be filled with untrained teachers; so in the long run the economy effected in money alone would more than offset the cost of the normal training class, not to mention the great economy in the lives of the pupils resulting from the shortened course, or the much more thorough education they would receive if the course were not shortened.

"We earnestly and urgently commend this project to the consideration of the government of Canada. We feel sure that they will see the obvious need for such a school and will be most willing to make the necessary provision therefor."

The Work of the School

The reports of Dr. Boyce, the attending physician, and Mr. H. J. Clarke, B.A., the literary examiner, are appended herewith. Both show the work of the school to be in a satisfactory condition. The health of the children on the whole has been good and the progress in the classes excellent. Mr. Clarke gave considerable more time to the work than in former years and inspected very thoroughly the work of the individual teachers and his report for the year will be of corresponding value.

Before closing this report I wish to thank you, Sir, and Dr. Colquhoun as well, for the courtesy and assistance given me during the year.

I have the honour to be,
Sir,
Your obedient servant,

C. B. COUGHLIN
Superintendent.

Belleville, November 1st, 1921.

Officers of the School

C. B. Coughlin, M.D. .....Superintendent.
J. W. Pearce .....Bursar.
W. W. Boyce, M.D. .....Physician.
J. Chant, M.D. ..... Oculist and Aurist
Miss E. A. Willoughby .....Matron.
Miss A. B. Schofield .....Domestic Science Teacher and Assistant Matron.

Teachers

Manual.	Oral.
Miss G. Linn, Supervising Teacher, Manual Department.	W. J. Campbell, Supervising Teacher, Senior Oral Department.
D. R. Coleman, M.A.	Miss C. Ford, Supervising Teacher, Junior Oral Department.
Mrs. Sylvia C. Balis.	Geo. F. Stewart.
Miss Ada James.	Miss L. Deannard.
Miss Nina Brown.	Miss I. B. Palen.
	Miss B. Rierdon.
	Miss E. Panter, B.A.
	Miss F. Curry.
	Miss L. Carroll.
	Miss V. Handley.
	Miss E. Nurse.
	Miss H. A. Stirk.
	Miss B. Sunter.
	Miss I. G. Malcolm.
	Miss K. B. Scott.
	Miss B. A. Wilson.
	Miss G. Bradley.
	Miss H. Dutton.
	Miss E. Haugh.
	Karl C. VanAllen.
	Edward B. Lally.

Miss A. B. Schofield .....Domestic Science Teacher.
Mrs. L. G. Williams .....Teacher of Sewing.
Miss I. McBride .....Clerk and Stenographer.
Wm. Nurse .....Storekeeper and Assistant Supervisor of Boys.
Wilfrid Smith .....Supervisor of Boys.
A. Morrice .....Shoemaker and Instructor in Shoemaking.
M. W. Parks .....Carpenter and Instructor in Carpentering.
J. N. Boyd .....Baker and Instructor in Baking.
J. Spanner .....Printer and Instructor in Printing.

PHYSICIAN'S REPORT

Belleville, Ont., November 1st. 1921

To The Honourable R. H. Grant, M.P.P.,
Minister of Education for Ontario.

Sir:

I have the honour to present my report on the health of the Ontario School for the Deaf for the session of 1920-21.

At the opening of the school the ordinary precautions of inspecting all the children were taken. Because of so much epidemic disease throughout the Province, and especially the presence of diphtheria, it was thought best to obtain throat swabs from all the children and attendants for bacteriological examination, when it was found that nine children were "carriers" of the germ. They were promptly quarantined until negative swabs were returned. Notwithstanding this precaution, about one month afterwards, we had a severe case of diphtheria, and between then and the middle of the following January we had twelve cases, mostly mild. During the epidemic swabs were again taken of all the children and thirteen gave positive results.

In November we had an outbreak of smallpox and chicken pox, both of a mild type. To prevent a general spread we vaccinated all children who had not been recently vaccinated. We had ten cases of smallpox and twenty-three cases of chicken pox.

With the above exceptions the general health of the School has been fairly good, the sickness being an average of what we have year after year. Of the more important cases I would mention, heart disease 2; rheumatism 2; typhoid fever 1; scarlet fever 3; pneumonia 1; bronchitis 10; chorea 1; tonsilitis 3; influenza 12; erysipelas 1; also a number of cases of gastro-intestinal disorders, anaemia and debility, skin diseases, middle ear disease, as well as minor accidents and injuries.

Among the staff and attendants we had some sickness but not of a severe nature, excepting a case of scarlet fever in an attendant.

Toward the end of the session our institution nurse, Miss Coombe, was taken sick. She improved during the summer and returned to duty at the opening of the present session, but soon after suffered a relapse, complications set in and she became seriously ill. Though still very sick there is some improvement.

I have the honour to be,
Sir,
Your obedient servant,
W. W. Boyce.

LITERARY EXAMINER'S REPORT

Belleville, Ont., May 12th, 1921.

To The Honourable R. H. Grant,
Minister of Education in Ontario.

Sir:—

I have the honour to present for your consideration, a report on my inspection of the Ontario School for the Deaf.

Having spent over three weeks in this inspection, I was able to go more carefully into the work of the several classes, than was possible on any former visit.

Organization

A year ago I reported five classes in the Manual Department. At present there are only three. Miss Bell who has been for many years associated with this school, has retired and Miss Brown has been transferred to the Oral Department. Sufficient pupils have been transferred to the oral department, to account for these two classes, and many of these transfers are doing well. In any event they are making as satisfactory progress as they would make in a manual class. There are three new teachers in the Junior Oral Department, Miss Ward, Miss Wilson and Miss Bradley, all of whom come from successful experience as Public School teachers, and who give every promise of becoming successful teachers of the Deaf. There has been no change in the Supervising heads of Departments.

Course of Study

The Course of Study has been under revision for some time. The revision has been completed so far as the Junior Oral Department is concerned, and is apparently quite satisfactory. The course in the Senior Oral Department is nearing completion, and should be equally satisfactory. At the request of Doctor Coughlin, I spent two half days with the committee having this work in charge, and while I may not have been able to assist them very materially, I personally gained information that will be of service to me should I again be called upon to inspect this school. As reported several times before, this school follows as nearly as possible. the course laid down for the Public Schools of the Province, and the present revision has for its object, the stressing still further, if it is possible, the subject of language, which is the great problem in deaf education. It is absolutely impossible for any one who has not carefully studied these children to appreciate the difficulties that confront the teachers in the early stages particularly. The hearing child comes to school with a fairly good control of his mother tongue, that he acquired with little or no effort. These children come without a solitary word, having expressed themselves by signs, that express ideas but not words. Years of patient and careful teaching is necessary to bring these children to the stage where the hearing child begins in his school life, so far as a command of language is concerned. As in former years, that excellent idea of sending home with each child, a booklet containing the words that he knows and can use is being continued, so that parents who are willing to do so (and who is not?) may materially assist their children during the long vacation, by keeping up the children's knowledge in this respect.

Work Examined

I practically saw every class taking every subject on the curriculum, but it would not be necessary or profitable for me to give in detail all the work that I observed, but I can assure you, that the work continues to be of a high order of proficiency. I note too, considerable advance in the ability of the several classes to read the lips. Perhaps this is the most noticeable point in this year's inspection, and while it is highly important that as many as possible become proficient in speech, it is more important that they become expert lip-readers. During my inspection, I took the opportunity of getting from the two senior classes an original composition, on a subject on which they had no previous drill or preparation. I read the results with particular interest, showing as they did the great advance in the use of language from what I saw at my first inspection in 1908. I took occasion to show some of the essays to some of my Public School Principals, who

complimented them highly. Supplementary Reading is also being stressed, particularly in the upper classes, and the results are good. In fact I would pronounce the work good in all subjects, with the exception of Art, which is not being taught. It seems to me that this subject could be taken to advantage.

A new feature of the work, that appeals to the children, is rhythmic exercises. A powerful gramophone has been provided, and under the direction of Miss Ward a good start has been made. It can be seen already that there are great possibilities here with these children, and I am looking forward to seeing the results a year hence.

A year ago I referred to the teaching of language in the trade classes. I am pleased to report to you, that good progress has been made in this branch of the work and language is being made an integral part of the instruction in the various trades. While I was not directed to inspect the industrial classes, I did visit them, and I would like to say that in the carpenter shop I saw cabinet work that was done by the boys, that would do credit to any cabinet-maker. The shoe shop, printing office and bakery are also giving thorough instruction in these trades.

General Remarks

(1) The progress that is being made on the new building is of particular interest, for we can see the time approaching when the various classes will be able to meet in suitable class rooms.

(2) The organization is good.

(3) The teaching staff is composed in the main of very strong teachers, who are deeply interested in their work, and in their pupils.

I have the honour to be,

Sir,

Your obedient servant,

H. J. CLARKE,

Public School Inspector,

South Hastings, Belleville and Trenton.

List of Pupils in the Ontario School for the Deaf for the Year Ending, October 31, 1921.

County, etc.	P. O. Address
Algoma District:	
Donovan, Ellen	Sault Ste. Marie.
Webb, Kathleen	Dayton.
Alberta, Province of:	
Nouak, Nick	Didsbury.
Brant:	
Black, Nellie	Brantford.
Moors, Beatrice	St. George.
Moors, Grace	St. George.
Reid, James	Brantford.
Tate, Mary	Harley.
Laform, John	Hagersville.
Bruce:	
Crowe, Robert	Dobbinton.
McKee, Maud	Pinkerton.
Rourke, Melville	Tara.
Thompson, Robert	Lucknow.
Carleton:	
Brigham, Murray	Ottawa.
Carriere, Joseph	Ottawa.
Delinelle, Lauretta	Ottawa.
Garvin, Jean	Ottawa.
Jones, Mabel	Billings' Bridge.
Little, Sadie	Ottawa.
Pittaway, Audrey	Ottawa.
Quinn, Carman	Ottawa.
Radmore, Frank	Ottawa.
Simpson, Ian	Ottawa.
Towns, Dora	Ottawa.
Dundas:	
Dixon, Fred	Winchester.
Dufferin:	
Boyle, Lizzie	Waldemar.
Boyle, John	Waldemar.
Middleton, Helen	Shelburne.
Smith, Gordon	Riverview.
Sherritt, Susie	Corbetton.
Essex:	
Andrews, Kenneth	Windsor.
Fairful, Maisie	Leamington.
Agopsourcz, Helena	Windsor.
Agopsourcz, Bogdan	Windsor.
Bostnari, George	Ford.
Mazzali, Emma	Windsor.
Maitre, Margaret	Sandwich.
Maitre, Loretta	Sandwich.
Maitre, Evelyn	Sandwich.
Maitre, Donat	Sandwich.
O'Connor, Cleon	Windsor.
Sanders, Alma	Windsor.
Standish, Dorothy	Essex.
Suddy, Fred	Windsor.
Elgin:	
Eames, Carl	St. Thomas.
Gwalter, Kathleen	St. Thomas.
Elgin.—Continued	
Fawcett, George	West Lorne.
Lawrence, Jean	St. Thomas.
Stoner, Irene	St. Thomas.
Wonnacott, Nellie	Aylmer.
Frontenac:	
Charlton, Archie	Kingston.
Godfrey, Delpha	Mountain Grove.
Gilmour, Maud	Kingston.
Smith, Marie	Kingston.
Wood, Alonzo	Cataraqui.
Grey:	
Grimoldby, Clifford	Owen Sound.
Henderson, Harvey	Owen Sound.
Kinsman, Mary	Proton.
Snell, Ruby	Durham.
Haldimand:	
Foster, Dorothy	Dunnville.
Foster, Sylvia	Dunnville.
Foster, Irene	Dunnville.
Maw, Harris	Caledonia.
Halton:	
Kenney, Francis	Acton.
Patterson, Walter	Milton.
Patterson, Lewis	Milton.
Hastings:	
Curtis, Willie	Marmora.
Coles, Clifford	Belleville.
Fox, Arnold	Moira.
Guy, Lawrence	Belleville.
Ingram, Nellie	Faraday.
Liddle, Pearl	Shannonville.
Lafreniere, Edith	Otter Creek.
Partrick, Margaret	Trenton.
Roberts, John H	Belleville.
Robbins, Cecil	Belleville.
Shaw, Vera	Trenton.
Schwager, Albert	Thomasburg.
Waldron, Arthur	Trenton.
Whalen, Mary A	Point Anne.
Yerrow, Bruce	Belleville.
Huron:	
Bell, Elwood	Goderich.
Cole, Melvin	Clinton.
Laporte, Dennis	Zurich.
Kenora, District of:	
McMillan, Hugh	Kenora.
Kent:	
Antaya, Roy	Chatham.
Brewer, Blanche	Bothwell.
Christian, Gertrude	Wallaceburg.
Dubois, Madeline	Wallaceburg.
Goodison, Ada	Coatsworth.
Healey, Dorothy	Wheatley.

List of Pupils in the Ontario School for the Deaf (Continued)

County, etc.	P. O. Address
Kent.—Continued	
Julien, Joseph	Wheatley.
Roberts, John E	Thamesville.
Rechie, Napoleon	Chatham.
Lanark:	
Dart, Grace	Smith's Falls.
Rathwell, Charles	Perth.
Wenzel, Doris	Lanark.
Leeds:	
Bishop, Ethel	Gananoque.
Davis, Jay	Brockville.
Lambton:	
Batty, Blanche	Sarnia.
Johnston, Olive	Sarnia.
Jackson, Myrel	Oil Springs.
Jackson, Leone	Oil Springs.
Henderson, Gordon	Sarnia.
McMillen, Douglas	Sarnia.
Pembleton, Anna	Forest.
Volk, Mildred	Forest.
Lincoln:	
Harrison, Jack	Grimsby.
McMillan, Duncan	St. Catherines.
Thornton, Lloyd	Vineland Station
Watson, Bert	St. Catherines.
Middlesex:	
Bosley, Wilfred	London.
Bradshaw, Carl	London.
Eager, Mary	London.
Garside, Florence	London.
Hodgins, Albert	London.
Hutchinson, William	London.
Smith, Wesley	Walkers.
Summers, Moses	Muncey.
Muskoka District:	
Franklin, Elmer	Foote's Bay.
Johnston, Ella	Utterson.
Nipissing District:	
Anderson, Julia	North Bay.
Yandeau, Garfield	Madawaska.
Hanna, Abraham	North Bay.
Norfolk:	
Davis, Florence	Simcoe.
Krick, William	Vanessa.
Krick, Norman	Vanessa.
Northumberland:	
Parker, Mary	Baltimore.
Smith, Isabella	Cobourg.
Oxford:	
Groves, Russell	Ingersoll.
Miller, Willie	Tavistock.
Wagester, Walter	Tavistock.
Youngs, Cylnne	Embro.
Ontario:	
Ballagh, Edith	Whitby.
Gura, Nicky	Oshawa.
Luke, Elsie	Brooklin.
Scott, Walter	Sunderland.
Toyne, Nellie	Pickering.
Wilton, Leslie	Claremont.
Prince Edward:	
Harris, Mary	Picton.
Perth:	
Eickemeyer, Norman	Monkton.
Parry Sound:	
Bagby, Florence	Burk's Falls.
Hurtubise, Archie	Callander.
Rayburn, Winifred	Powassan.
Windsor, George	Callander.
Young, Edna	Trout Creek.
Peel:	
Davey, John	Brampton.
Elliott, Madeline	Bolton.
Peterborough:	
Farrance, James	Peterborough.
Gerow, Estella	Peterborough.
Gerow, Albert	Peterborough.
Meyett, Joseph	Peterborough.
Meyett, Charles	Peterborough.
Meyett, Frances	Peterborough.
McMillan, Ena	Havelock.
Richardson, Herbert	Keene.
Prescott:	
Gwynne, Stuart	Hawkesbury.
Quebec, Province of:	
Joyce, Andrew	Quyon.
Pye, Rodger	Windsor.
Renfrew:	
Coules, Michael	Renfrew.
Dick, Alton	Renfrew.
Hunter, George	Renfrew.
Hunter, Raymond	Renfrew.
Hunter, Clifford	Renfrew.
Jette, Lemay	Pembroke.
Schneider, Milton	Pembroke.
Scully, Mamie	Ashdad.
Rainy River District:	
Olson, Alma	Shenston.
Simpson, Norine	Rainy River.
Simpson, Zona	Rainy River
Simcoe:	
Bowen, Esther	Cookstown.
Bowen, Margaret	Cookstown.
Green, Jean	Orillia.
Rivet, Douglas	Midland.
Powell, Harold	Lisle.

List of Pupils in the Ontario School for the Deaf (Continued)

County, etc.	P.O. Address.
Simcoe.—Continued	
Sloan, Harry	Lefroy.
Sloan, Wallace	Lefroy.
Tudhope, Catherine	Orillia.
Wheat, Dorothy	Midland.
Wright, Elsie	Midland.
Stormont:	
Benedict, Rose	Cornwall.
Campbell, Mary	Avonmore.
Ingle, Agnes	Cornwall.
Latour, Rene	Cornwall.
Boileau, Gervais	Cornwall.
Sudbury District:	
Bealer, Frank	Copper Cliff.
Legrandeur, Victor	St. Charles.
Martel, Lorenzo	Sudbury.
Toppazzini, Albert	Copper Cliff.
Thunder Bay District:	
Thompson, Jean	Fort William.
Timiskaming District:	
Audet, Alcide	Cobalt.
Barnes, Ada	Haileybury.
Brent, Margaret	Timmins.
Leo, Rose	Cobalt.
Whalen, Loretta	New Liskeard.
Whalen, Mary	New Liskeard.
Victoria:	
Brandon, William	Kinmount.
McNish, Helen	Kirkfield.
Patrick, Nellie	Lindsay.
Wellington:	
Barbour, Clifford	Hillsburg.
Chambers, Pearl	Rockwood.
Johnston, Viola	Drayton.
Wentworth:	
Allen, Muriel	Hamilton.
Armes, Dennis	Hamilton.
Bluestein, Shina	Hamilton.
Gorman, Walter	Hamilton.
Dennis, Harry	Hamilton.
Hacking, Willie	Hamilton.
Holt, Nathan	Hamilton.
Moreland, Jack	Hamilton.
Murtell, Cecil	Hamilton.
McShane, Arthur	Hamilton.
Peel, Douglas	Hamilton.
Tait, William	Hamilton.
Webb, Gordon	Hamilton.
Welland:	
Anthony, Jessie	Bridgeburg.
Hulett, Virginia	Niagara Falls.
Tryon, William	Welland.
Waterloo:	
Durrant, Evelyn	Breslau.
Gartung, Gertrude	Kitchener.
Waterloo.—Continued	
Hirons, George	Waterloo.
Jantzi, Amanda	St. Agatha.
Klinkman, Mary	New Hamburg.
Kube, Laura	Kitchener.
Maule, Rona	Galt.
Wagler, Elmina	Baden.
York:	
Angus, Jack	Toronto.
Abrams, Willie	Toronto.
Blais, Gladys	Toronto.
Baillie, Dorothy	Toronto.
Brooks, James	Toronto.
Buchan, Lucy	Toronto.
Buchan, Caroline	Toronto.
Bennett, Charles	Toronto.
Brown, Leonard	Toronto.
Buckle, Oscar	Toronto.
Breen, Doris	Long Branch.
Burlie, Willie	Toronto.
Bellamy, Edith	Toronto.
Clark, Gladys	Toronto.
Daniels, Walter	Toronto.
Dickson, Violet	Toronto.
Davey, Charles	Toronto.
Dine, George	Toronto.
Ducker, Freida	Mount Dennis.
Deyell, Bob	Toronto.
Davis, Thelma	Toronto.
Egginton, Maud	Markham.
Egginton, Gwendoline	Markham.
Egginton, Victor	Markham.
Ford, Raymond	Humber Bay.
Freedman, Sarah	Toronto.
Goulding, Tom	Toronto.
Goldman, Joe	Toronto.
Glasner, Morris	Toronto.
Glennie, Alexander	Toronto.
Graham, Dorothy	Toronto.
Herman, Jack	Toronto.
Kelcey, Lillian	Toronto.
Leeder, Flora	Toronto.
Lee, Charles	Toronto.
Laforte, Augustine	Toronto.
Laforte, Isabella	Toronto.
Laughlin, Nellie	Toronto.
Lawrence, Jack	Toronto.
Lockett, Freda	Lambton Mills.
Maiola, Lorenzo	Toronto.
Malinsky, Rosie	Toronto.
Malinsky, Louis	Toronto.
Morton, Ruth	Toronto.
McGovern, Willie	Toronto.
McGovern, Elizabeth	Toronto.
McCallum, Duncan	King.
Natale, May	Toronto.
Osborne, Iona	Sutton West.
Petch, Lera	Milliken.
Pack, Sydney	Mount Dennis.
Proctor, Leslie	Toronto.
Rank, Joffre	Toronto.
Roach, Lawrence	Toronto.
Reading, Victor	Toronto.

List of Pupils in the Ontario School for the Deaf (Concluded)

County, etc.	P.O. Address.	County, etc.	P.O. Address.
York.—Continued		York.—Continued	
Robinson, Charles	Toronto.	Scott, Bruce	Toronto.
Roberts, Florence	Toronto.	Tate, James	Toronto.
Richardson, Gordon	Toronto.	Tweedie, Lorena	Toronto.
Stothers, Alva	Toronto.	Tettman, Gladys	Toronto.
Sole, Erna	Toronto.	Thomson, Daphne	Toronto.
Smith, Norma	Toronto.	Wall, Nettie	Toronto
Storks, Doreen	Toronto.	Wall, Sydney	Toronto.
Seuse, Irvine	Toronto.	Wraight, Lucy	Toronto.
Strasser, Anna	Oak Ridges.	Wicks, Jack	Toronto.
Scott, Willie	Toronto.		

Number of Pupils in Attendance each Official Year since the Opening of the School

	Male	Female	Total
From October 27th, 1870, to September 30th, 1871	64	36	100
" " 1st, 1871, " 1872	97	52	149
" " 1872, " 1873	130	63	193
" " 1873, " 1874	145	76	221
" " 1874, " 1875	155	83	238
" " 1875, " 1876	160	96	256
" " 1876, " 1877	167	104	271
" " 1877, " 1878	166	111	277
" " 1878, " 1879	164	105	269
" " 1879, " 1880	162	119	281
" " 1800, " 1881	164	132	296
" " 1881, " 1882	165	138	303
" " 1882, " 1883	158	135	293
" " 1883, " 1884	156	130	286
" " 1884, " 1885	168	116	284
" " 1885, " 1886	161	112	273
" " 1886, " 1887	151	113	264
" " 1887, " 1888	156	109	265
" " 1888, " 1889	153	121	274
" " 1889, " 1890	159	132	291
" " 1890, " 1891	166	130	296
" " 1891, " 1892	158	127	285
" " 1892, " 1893	162	136	298
" " 1893, " 1894	158	137	295
" " 1894, " 1895	160	135	295
" " 1895, " 1896	173	137	310
" " 1896, " 1897	164	128	292
" " 1897, " 1898	167	138	305
" " 1898, " 1899	161	132	293
" " 1899, " 1900	153	130	283
" " 1900, " 1901	157	143	300
" " 1901, " 1902	147	141	288
" " 1902, " 1903	140	143	283
" " 1903. " 1904	137	134	271
" " 1904, " 1905	130	138	268
" " 1905, " 1906	116	143	259
" " 1906, " 1907	126	145	271
" " 1907, " 1908	133	143	276
" " 1908, to October 31st, 1909	130	151	281
" November 1st, 1909, " 1910	143	149	292
" " 1910, " 1911	138	143	281
" " 1911, " 1912	135	126	261
" " 1912, " 1913	139	129	268
" " 1913, " 1914	152	144	296
" " 1914, " 1915	156	160	316
" " 1915, " 1916	158	152	310
" " 1916, " 1917	145	148	293
" " 1917, " 1918	143	147	290
" " 1918, " 1919	137	140	277
" " 1919, " 1920	143	134	277
" " 1920, " 1921	153	147	300

Cost per Pupil, School for the Deaf, Years ending October 31st, 1920 and 1921

Heading of expenditure	Total expenditure year ending October 31st, 1920	Yearly cost per pupil October 31st, 1920	Weekly cost per pupil October 31st, 1920	Total expenditure year ending October 31st, 1921	Yearly cost per pupil October 31st, 1921	Weekly cost per pupil October 31st, 1921
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
Medical department	371 89	1 54	03	278 85	1 13	02
General groceries	24,977 70	103 65	1 99	22,621 24	92 33	1 77
Bedding and clothing	341 88	1 42	03	1,563 79	6 38	12
Fuel, light and power	32,896 63	136 50	2 63	29,720 71	121 31	2 33
Laundry, soap and cleaning	1,757 01	7 29	14	1,497 66	6 11	11
Books and apparatus	1,425 62	5 95	11	1,656 71	6 78	13
Printing, postage, etc	882 98	3 65	07	825 98	3 36	06
Furniture and furnishings	1,082 11	4 49	09	1,222 10	4 99	09
Farm, feed, etc	.....	.....	.....	454 17	1 85	03
Repairs, ordinary	1,916 60	7 95	15	1,811 97	7 40	14
Water	900 00	3 74	07	900 00	3 67	07
Sewage	312 73	1 29	02	306 35	1 25	02
Salaries and wages	61,489 71	255 14	4 91	69,318 52	282 93	5 44
Miscellaneous	2,081 87	8 64	17	1,747 25	7 13	13
Railway fares of pupils, lumber for seats, hardware, etc., supplies for boiler room, officers' travelling expenses, musical instruments and office supplies, wages of extra carpenters, etc	1,784 63	7 41	14	3,861 61	15 76	31
Total Expenditure	132,221 36	548 66	10 55	137,786 91	562 38	10 77
Refunded to Provincial Treasurer for perquisites, paying pupils, etc	10,066 57	41 77	17	11,171 44	45 59	19
Net Expenditure	122,154 79	506 89	10 38	126,615 47	516 79	10 58

Average number of pupils, 1919-20, 241.
Annual cost per pupil, $506.89.
Weekly cost per pupil, $10.38.

Average number of pupils, 1920-21, 245.
Annual cost per pupil, $516 79.
Weekly cost per pupil, $10.58.

Certified Correct,
J. W. Pearce,
Bursar.

THIRTY-THIRD ANNUAL

Archæological Report

1921-22

By Dr. R. B. ORR

BEING PART OF

Appendix to the Report of the Minister of Education Ontario

PRINTED BY ORDER OF

THE LEGISLATIVE ASSEMBLY OF ONTARIO

TORONTO
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PRESENTATION

To the Honourable R. H. Grant, M.A.,

Minister of Education for Ontario.

Sir,—I have the honour to submit herewith the thirty-third Annual Archæological Report of the Ontario Provincial Museum. Permit me to extend to you, on behalf of the Museum, our thanks for many favours received. Through your foresight, sir, that magnificent collection, made by the late Mr. G. J. Chadd, of Trenton, was secured. The price paid was nominal. Mrs. Chadd, with the true patriotism of a citizen of Ontario, desired that the life-work of her late husband should not go out of the province. This collection comprises many thousands of artifacts, and was the largest private collection in the Dominion of archæological, biological, ethnological, mineralogical and historical relics. The archæological and historical material represents not only the aboriginal life of the Bay of Quinte district, but also all the artifacts used by the first settlers in Ontario. For half a century Mr. Chadd devoted his spare time to adding to his collection, which, at his decease, filled a large building in Trenton. A special room has been arranged for it in the Museum. The biological and mineralogical gifts have been arranged for in their proper departments. Many other collections have been received and accredited in the usual place. The late Mr. Archibald McKenzie, of Guelph, bequeathed to the museum his fine collection of Indian artifacts.

I have the honour to be,

Sir,

Your obedient servant,

Rowland B. Orr.

Toronto, December 31st, 1921.

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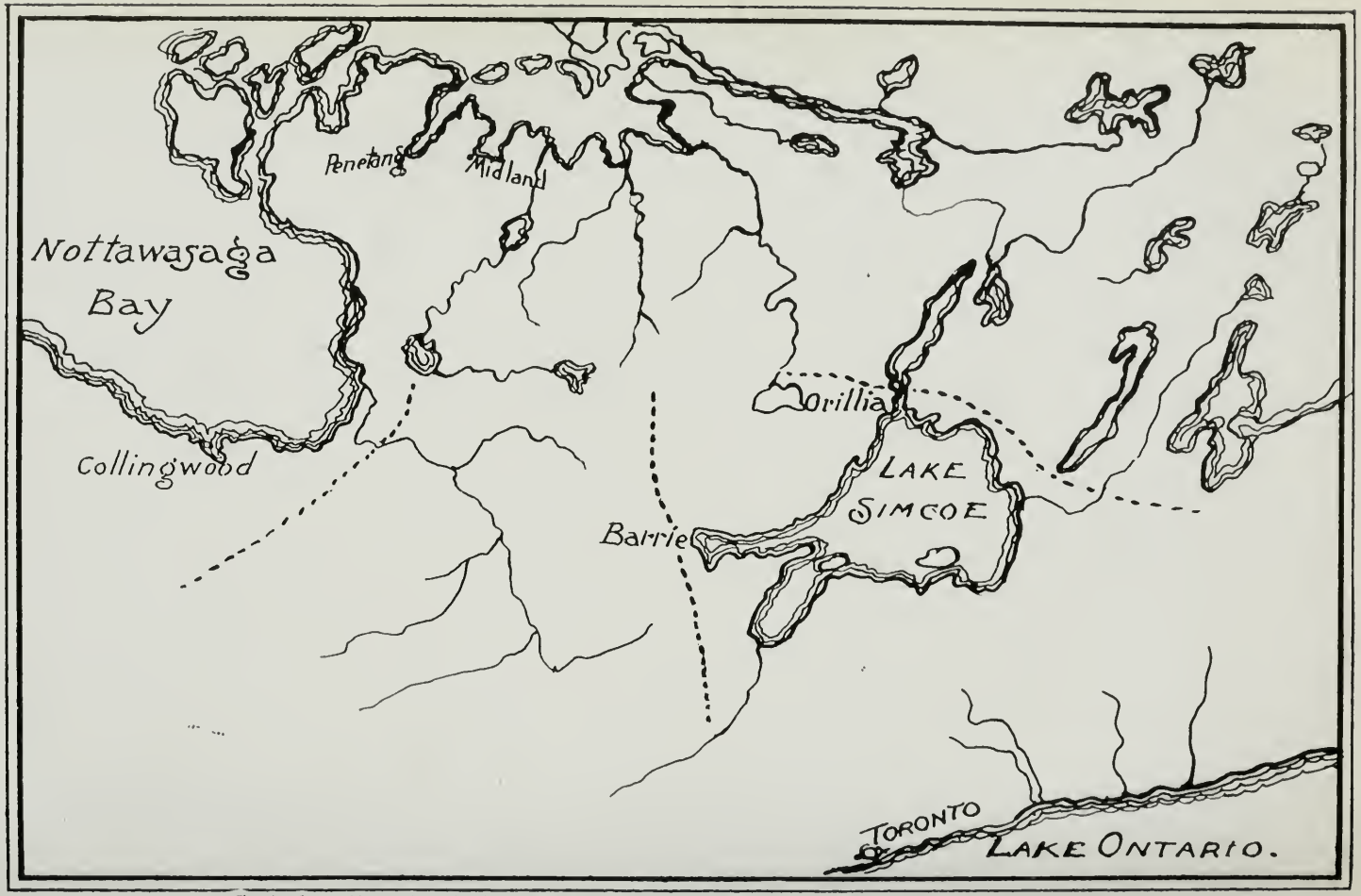
FOREWORD

The French dominion is a memory of the past; and when we evoke its departed shades, they rise upon us from their graves in strange, romantic guise. Again their ghostly camp-fires seem to burn, and the fitful light is cast around on lord and vassal and black-robed priest, mingled with wild forms of savage warriors, knit in close fellowship on the same stern errand. A boundless vision grows upon us: an untamed continent; vast wastes of forest verdure; mountains silent in primeval sleep: river, lake, and glimmering pool; wilderness oceans mingling with the sky. Such was the domain which France conquered for civilization. Plumed helmets gleamed in the shade of its forests, priestly vestments in its dens and fastnesses of ancient barbarism. Men steeped in antique learning, pale with the close breath of the cloister, here spent the noon and evening of their lives, ruled savage hordes with a mild, parental sway, and stood serene before the direst shapes of death. Men of courtly nurture, heirs to the polish of a far-reaching ancestry, here, with their dauntless hardihood, put to shame the boldest sons of toil.

"The Pioneers of France in the New World."

Francis Parkman.



Central portion of Ontario showing the lines of migration of the principal Huron tribes.

Five years after the Jesuits had introduced their mission amongst the Hurons, viz., in the year 1639, they established Ste. Marie on the Wye as their permanent headquarters. In this way they completed the foundation of their Huron Mission; at the same time they defined, with the methodical skill and precision so usual to French efforts, its extent and subdivisions in their written annual reports (Relations), which have become one of the very few original sources of information about the Hurons. They prepared a diagram, also, giving the positions of their leading Huron mission stations about the same period, and it appeared as a small inset map in the History of Canada by Father DuCreux, published, however, twenty years later. There have been many reprints of this small map during the past seventy-five years, and its historical value can scarcely be over-estimated.

The Hurons, at this stage of their national life, consisted of several tribes that had been drawn or thrust together into the most remote and protected parts of the tract of land lying between the two southerly arms of Georgian Bay. Here they hoped to secure mutual protection against the Iroquois, who often attacked them. Taking up the Huron tribes, then, at this significant and almost final period of their history, one can quite easily recognize, with the help of some information about the country itself, and the Hurons' remains, the places of the several tribes, as then described, and co-ordinate them with the present topography. Almost the same arrangement of the tribes lasted down to the break up of the nation ten years later, and it will form the subject of the paragraphs which immediately follow.

Boundaries of the Huron Tribes.

The Bear Tribe (*Attignaouantans*). The territory of this tribe, the most westerly of the Huron confederacy, was sharply defined on all of its four sides. Portions of Georgian Bay formed two of these—Nottawasaga Bay, on the west, and Matchedash Bay, on the north. Along their eastern side, the river Wye separated them from other Huron tribes. Another natural boundary afforded them and the adjoining tribes a protection on part of the south side; this was Cranberry Lake and marsh, which extended up the Wye river to Orr Lake, five miles farther east, forming a wide, marshy tract, which protected the Huron tribes at the period above mentioned along their southern frontier. This important water system is indicated by the name of Lake Anaouites on DuCreux's map. The country of the Bear Tribe, therefore, coincided nearly with the boundaries of the present Township of Tiny, in which have been found, up to the present time, the remains of above one hundred village sites, large and small. In the territory inhabited by the Bear Tribe the largest number of villages

recorded by any writer of that period as having been occupied at once was fourteen, (Huron Relation, 1638, p. 38, Can. Edition, p. 39, Vol. XV, Burrows' reprint). Champlain mentions only five principal Bear villages in the same area, but it is not evident whether he meant this was the full number in existence at the time or that he counted only the largest of their communities, as minor villages always existed. The Bear Tribe constituted half of the Hurons, and their accent differed from each of the other tribes (Huron Relation, 1636). The majority of village sites found on clearing the forest in modern times in the Township of Tiny were Huron sites, as each village had to be moved every few years for sanitary reasons.

Ataronchronons. This tribe dwelt east of the Wye River, while the territory of the Bear Tribe was west. Amongst them were Ste. Marie and the Mission of St. Louis. They inhabited central parts of the Township of Tay, in the present topography, and especially the parts of Tay near the arm of Georgian Bay called Matchedash Bay.

Atahotaenrats. The Indian town of Scananaenrat, where the Jesuit missionaries had their mission of St. Michael, was one of the largest in the Huron country, and by itself comprised the entire tribe. It was on the main line of travel leading from the mission towns of the Bear Tribe in the Township of Tiny south-eastward to the two other inland tribes. The small map in Father Du-Creux's History places it at a short distance north-west of the small body of water, which is easily identified, and now known as Orr Lake; and there are extensive remains in the tract of land immediately north of this lake that correspond very well with the numerous references to St. Michael in the Relations. Here have been found, in a space about two miles square, traces of a large town and of half a dozen others, smaller but having similar kinds of relics. Patches of ground strewn with French iron tomahawks of that period—the signs of conflict—were common in this neighborhood, confirming the Jesuits' accounts of the battles of 1648-50, when 700 Huron warriors were quartered here in readiness, (Huron Relation, 1649, chap. 3), and suggesting other conflicts which these chroniclers had probably left unrecorded in the general confusion of that period. Several farms in the first concession of Medonte Township (lots 68 to 74 inclusive), in what appears to have been the immediate neighborhood of St. Michael, abounded, when first cleared of the forest, in this class of relics.

The Cord Tribe (*Attignenougnacs*). This, and the Bear Tribe, were not only the most important, but the oldest of the Huron tribes, "having received into their country, and adopted, the others" according to Father Lalemant, (Huron Relation, 1639, p. 50, Can. Edition; p. 227, Vol. XVI, Burrows' reprint) and were able to trace their tribal history backward for two centuries. This (Cord) Tribe was the southernmost of the Hurons. One of its most important towns was Teanaustaye, located in what is now Medonte Township. Here was situated the Jesuit mission of St. Joseph, destroyed by the Iroquois in 1648. Their territory coincided with the central and northerly parts of Medonte Township at the period under consideration.

The Rock Tribe (*Arendarhonons*). This was the easternmost tribe of Hurons. Sagard called them "nation de la Roche." They were the first of Hurons to engage in trade with the French, and regarded themselves as their special allies. It was with this tribe that Champlain spent the winter of 1615-16, at their vil-

lage of Cahiague, where, later, the Jesuits established the mission of St. Jean Baptiste. They dwelt in north-easterly parts of Oro, south-easterly parts of Medonte, and in Orillia Townships.

The foregoing boundaries of each of the tribal divisions of the Hurons, as they existed about the year 1640, are of fundamental importance in any investigation of the nation, and are given above according to the best evidence to be obtained. The descriptions of their locations will be useful in the subsequent sections of this article.

The name which the Hurons had for themselves—"Wendat" (Ouendat) is known in the present day in the more familiar form of "Wyandot." It was from the French alone they received the name "Huron", the origin of which is specifically traced by Father Lalemant. (Huron Relation, 1639, p. 51, Can. Edition; p. 229, vol. XVI, Burrows' Reprint). He tells us the name arose from the way in which they wore their hair in a ridge of bristles upon the middle of the head, resembling boars. (hures) and states that this is the most authentic origin of the name.

Physical Features of the Huron Territory.

The former dwelling-place of the Hurons is a series or succession of about seven parallel ridges of loose, superficial materials, each successive ridge rising higher than the last, and the final one, at the highest central parts of the country, attaining an altitude of some 850 feet above the level of Georgian Bay. These ridges, which doubtless cover and get their shapes from the rock foldings beneath, have an average distance from one another, from crest to crest, of about five miles. They are made up of all kinds of recent, loose formations of sands, clays, gravels and boulder stones, and run in a north-north-east direction conformably with the Alleghany or Appalachian foldings common to the eastern parts of the North American continent. They are of fundamental importance in the physiography of the district in relation to the Hurons, as they determined the directions of the Huron trails, the positions of their inland towns and villages, and many other matters of the first importance in Huron affairs.

So important a consideration, then, as the physical features, which governed the courses of travel and other matters, deserves attention at this early stage of the enquiry, especially with reference to each of the tribes, since, with a full knowledge of the physiography, the course of Huron affairs becomes more intelligible.

The surface of the Township of Tiny, which contained the Bear Tribe, is undulating, nowhere exceeding 500 feet above the level of Georgian Bay, and is divided in a general way into four of the above-mentioned parallel ridges, with watercourses between every pair of them. At the north, the ground rises rapidly as it recedes from the shore, around which there still remains a fringe of forest with trees of second growth and scrubby woods. Along the west shore of the Township, its southern half has a long reach of sandy land, lined with bleak sand-dunes, amongst which a stunted vegetation barely exists—a feature common to all of the south-eastern or leeward shores of the great lakes. Behind these sand-dunes, the soil of the interior improves as one travels inwardly, and an agricultural population of Canadian settlers now occupies and cultivates it.

In Huronia—the shaded portions show the position of the H uron inhabitants from the year 1640 until their expulsion.

It was on the higher, wooded ground of the ridges in these interior parts that the most southerly communities of the Bear Tribe, as their remains show, had their villages and clearings for corn patches when the Jesuits were among them.

Into Tay, where the Ataronchronons dwelt, the continuous high ground of the fourth ridge in the Township of Tiny extends. This ridge, along which trails could run, makes its nearest approach to the Georgian Bay at the head of Victoria Harbor. This locality, accordingly, was the commercial centre of the Hurons, as it has also been of later Algonquin tribes, and with much insight the Jesuits perceived this when they placed their headquarters of Ste. Marie near this part. In other words, the physical features of the district were such that Victoria Harbor naturally became the focus or centre of the Huron population which had become established on the seven ridges, several trails radiating from the head of the harbor in as many inland directions along the higher ground. It appears to have been this very same centre, the heart of the country, that was smitten in 1649 by the Iroquois, otherwise the Hurons would not have deserted their country so precipitately after the capture of two of their villages, if these villages had merely been of the ordinary unfortified kind, and situated in an area of small importance to the whole nation. Two more of the ridges, or rather the ends of two, which come out of Medonte Township, complete the surface of Tay Township. The Atahotaenrats enjoyed, as already seen, the protection on their southern side of the water system that included Orr Lake, which is shown in DuCreux's map, and out of which the Wye River flows through wide, flat lands unsuitable for Huron occupation. The land which the tribe actually occupied northward was higher, and better suited to their agricultural habits; it formed the inner end of the fourth ridge in the Township of Tiny.

Of the four well-defined ridges of Medonte Township, which are separated from each other by three sharply-cut valleys containing large streams, three of the ridges have been already mentioned in connection with the preceding tribes and townships. In this township the Atahotaenrats occupied the ridge which merely touches the north-west corner of Medonte, in which some of their habitations appear to have been placed, as already pointed out, while on the southerly ends of the next two ridges, which also pass into Tay, the Cord Tribe lived entirely within Medonte. At some time prior to the period now under consideration, this tribe had sojourned or passed over the westerly half of Oro Township, leaving it much bestrewn with the remains of their villages of a former time.

On the fourth ridge of Medonte, at its north-easterly end, lived part of the Rock Tribe. Their other abodes, at least the sites of most of the Rock Tribe villages, were in north-eastern Oro, in the vicinity of Bass lake, where a large number of village remains have come to light. The land of the interior reaches its highest altitudes in the westward parts of Oro, descending a little toward the east where Bass Lake lies. Still further descents take place toward Lake Couchiching, which bounded the Rock Tribe on its easterly side.

Their Inland Trails through the Forests.

No feature of the Huron occupation is more important than their system of forest trails. The word "trail," as used here, means a path, (more or less unbeaten), through the high, open woods, and used by the Indians in going from one village to another, and to their fishing and hunting grounds.

The rivers and streams in the intervening valleys between the ridges, with their marshy margins, were not passable for the trails and this obliged the Hurons to use the ridges for the purpose of travel. The occurrence of different kinds of forests also compelled them to select and follow routes where the woods were open and free from underbrush. In the low ground of the valleys evergreen thickets checked their progress, as these were less open and passable than the open woods on the higher ground where maple, beech and other hardwoods, with pines in some localities, grew upon the ridges, and where especially, the trees had lofty branches and the woods were more easily passed through. Cedar and other bushy woods, on the other hand, grew upon the swampy flats, giving more underbrush. As the ridges make up the bulk of the land area, the forest trails along their higher parts became practically the only kind in use by the Hurons.

In a similar way, throughout Scotland and nearly all countries that are not entirely flat, the earlier drive roads and bridle paths kept their courses along the higher grounds. These were probably the only roads used before Caledonia was cleared of its forests. Even the Roman roads passed along the higher grounds.

Perhaps the Hurons sometimes "blazed" trees along these trails as it was a common practice among Indians to mark trees with "blazes" when making a trail, but it is very doubtful whether they ever adopted any general system of marking them, as the Iroquois were pursuing them, so markings were inadvisable, and also because all Indians had good instinct in the woods. Everyone knew the topography of his own district—the slopes and courses of the ridges, the directions of the flow of the streams and belts of hardwoods and evergreens and other features.

A trail of the class just mentioned followed each of the ridges in Tiny, Tay and Medonte, aggregating seven in all, as already stated. These had a general direction of north-northeast. Another crossed them transversely, connecting these ridge trails together, as the trunk of a tree and its branches. The transverse trail was in reality, (and may be called) the Main Trail. Joining the ridges together, as it did, it was the most notable trail in the country. Beginning near Cedar Point in the Township of Tiny, it proceeded overland, one branch of it passing on to the "Narrows" of Lakes Simcoe and Couchiching near Orillia (a distance of about 30 miles), and it even passed beyond this place. Another branch went to Hawkestone on Lake Simcoe. Obviously it was this main, overland trail that Champlain followed, passing (by the first mentioned branch) Bass Lake where Cahiague stood, and after him the Recollet and Jesuit missionaries followed it.

From the positions of important villages, from the compilation of data concerning the lands on which owners have found isolated relics at some distances from the traces of actual village sites, i.e. losses on what were the lines of travel, from the data furnished by early settlers of the trails used and kept open down to their own times, and from the topography of the ridges, it is possible to define the positions and directions of the original Huron trails and to lay down their locations on the map with some accuracy. Village sites have been found in sufficient numbers to show where the centres of Huron population were located, and how they were placed in relation to each other; and therefore, when these afford any evidence, how the trails ran.

Succeeding Indian tribes have preserved from obliteration this interesting class of Huron remains, viz., the same original trails that the Hurons used in

the early part of the seventeenth century. Various Indian nations in succession afterward kept them open down to the arrival of the white settlers in the nineteenth century. The trails which the Hurons travelled prior to 1649 were next travelled by the northern Iroquois, who, it is said, came into possession of the district after the Hurons. These, if they ever actually occupied Huronia, were in turn expelled from it by the Mississagas and Chippewas who were the next to follow the same trails which had been left open by their predecessors. The Chippewas continued to do so until they, in turn, retired to island reserves before the succeeding wave of white settlers. In completion of the proofs, the modern Chippewa Indians of the locality possessed traditions that the paths were used by their vanished Huron predecessors. Although Indian traditions do not prove anything, conclusively, yet they add a degree of assurance to what is otherwise known.

Some may doubt whether they were identical with the original forest paths of the Huron tribes, yet such is the case, as the remains of the Huron villages are situated at intervals along these trails; and numerous stone implements, French iron axes and knives, and other relics of the seventeenth century have been picked up in abundance near them.

The knowledge of the locations of the trails has also been derived in numerous cases from the pioneers of the district, who used them when other roads were wanting, before the present public roads were constructed through the forests, and in some cases of "trepass" roads they are still followed. It will thus be seen that successive races used the original courses of travel of the Hurons and indeed of perhaps still earlier races. Lumbering, agriculture and natural changes have almost succeeded in blotting out these ancient highways; but it is still possible to trace small portions of them in the patches of the forests that remain.

Apart from the system of ridge trails and their main, connecting, transverse trail which ran diagonally across the spine of the country, a trail overland to the Neutrals is worthy of mention. It left the district at the north-west part of Oro Township and passed the west end of Kempenfeldt Bay of Lake Simcoe. This was doubtless the trail by which Fathers Brebeuf and Chaumonot went in 1640 to the Neutrals.

There were other trails of importance in Huronia, but for the present it is not necessary for the purposes of this article to describe them in detail. Nor need anything be said now of the trails in those areas southward which the Hurons vacated before the period under consideration.

The Various Accounts and Estimates of Huron Population.

This survey of the Hurons thus far having reviewed the territorial boundaries of the tribes at the most distinctive stage of their history, the physical features of the country they inhabited and their lines of travel through it, the enquirer is in a position now to examine the statements of those writers who treated of them before the years to which this article has hitherto had reference. Some interpretation of the former history of the Huron tribes will also be possible in the light of the statements made by those writers, especially the earliest of them.

Champlain and Father LeCaron, both of whom visited the Hurons in 1615, reckoned 17 or 18 villages, with 10,000 persons, though this may have meant adults. Champlain called all the Hurons he met—the Ochateguins; yet he altered this name to "Hurons" in the 1632 edition of his works, in keeping with the other

French writers of the period, and he also mentions the Rock tribe in Tome 4 of his work. Ochateguin seems to be the same name as Attignaouantans, or Bear people, which he thus applied to the whole Huron confederacy, although one modern writer has assigned to the name an origin of a different kind. The generic name spelled "Ouendat" (Wyandot), including the Bear Tribe (Attignaouantans) as one of the confederates, came into general use at a later date especially through Father Lalemant's Huron Relations of 1639 and 1640. Sagard spelled it "Houandate" in his Huron Dictionary (Paris, 1632). If the other tribes were in the district at the time of Champlain's visit, he overlooked their existence and differences from the Bear Tribe, as he makes no distinction in the case of the inhabitants of even the most easterly town of the district, Cahiague. Yet we know that people of the Rock Tribe (Arendarronons) were at Cahiague in his time, as these were said to cherish his memory twenty-two years afterward, (Father Lalemant's Huron Relation, 1640), although the same inhabitants may have shifted the site of their town a short distance away, in the meantime, as a sanitary necessity.

The work of Sagard, of the Recollet mission, entitled "Le Grand Voyage du pays des Hurons," (chap. 6, paragraph 4, Paris, 1632), says the country (pays) of the Hurons consisted of three regions or provinces, viz:—

Enarhonon (Renarhonon in his Huron Dictionary in the same work)

Atigagnongueha, and the

Atingvahointan, or the Nation of the Bears,

(in which names it is easy to recognize the same tribal names used later by the Jesuits). Sagard also says that in this extent of country there were about twenty-five towns and villages, (some of which were fortified with palisades), containing in all about 30,000 or 40,000 souls. (Sagard was among the Hurons in 1623-4, and his books appeared a few years later). Elsewhere, at a later time, (Relation, 1659), Sagard divided the Hurons into three tribes—the Cord, the Rock and the Bears, which correspond with the three he had enumerated in his earlier work.

In 1635 Father Brebeuf found the Hurons were divided into twenty villages forming a population of about 30,000 souls. (Huron Relation, 1635, p. 33, Can. Edition; p. 115, vol. 8, Burrows' reprint). Father Brebeuf also repeats the same fact in the Relation for 1636 (Huron Relation, 1636, p. 138, Can. Edition; p. 313, Vol. X, Burrows' reprint). Twenty villages, being a round number, may have been intended as an approximation, yet doubtless a close one.

Father Lalemant, in 1639, estimated 32 villages, etc., in the five territorial missions which the Jesuits had established, and this forms the basis of the enumeration and their distribution at the most representative period of their career, as we saw in a former part of this article. In Father Lalemant's census of 32 villages here given, he included 9 villages of the Tobacco Nation, and so 23 villages was the actual number of Huron ones, as compared with Champlain's 17 or 18, and Father Brebeuf's 20. (See Father Lalemant's Huron Relation, 1640, p. 62, Can, Edition; p. 127, Vol. XIX, Burrows' reprint.)

In Father Lalemant's Huron Relation of 1640 appears his census of the five missions to the Hurons, with the total of 32 villages, which, as we have seen, included 9 villages of the Tobacco Nation. (Huron Relation, 1640, p. 61, Can.

Edition; p. 125, Vol. XIX, Burrows' reprint). Then follows in succeeding chapters his more particular enumeration of the five missions:—

Ataronchronons	4	(Chap. 5, par. 1).
Attignenogna	3	(Chap. 6, par. 2).
Attignaouentan	13	(Chap. 7, par. 1).
Ahrendarronons	3	(Chap. 9, par. 3).
Tobacco Nation	9	(Chap. 10, par. 2).
	32 villages.	

It will be seen that in this enumeration of 1640 he omits the Atahotaenrats which he gave in the Relation of 1639, and which Father Brebeuf said spoke a dialect a little different from that of the Bear Tribe (Huron Relation, 1636, Burrows' reprint, Vol. 10, p. 11). In lieu of the Atahotaenrats he gives the Ataronchronons, and includes St. Michel, which was the sole town of the Atahotaenrats, in the mission to the Cord Tribe. The Atahotaenrats, although apparently subordinate in numbers, held a central position in the row of tribes, like the Onondagas in the original Five Nations of Iroquois, and were thus politically very important.

There is some historical evidence of migration into the territory of the Hurons, e.g., 600 Wenrohronons in 1638 (Huron Relation, 1639, p. 59, Can. Edition; p. 25, Vol. XVII, Burrows' reprint). In the Huron Relation of 1640, Father Lalemant further says;—"The remnants of several other nations have come to take refuge among the Hurons," but, on the other hand, he adds—"These villages and cabins were much more populous formerly, but the extraordinary diseases and the wars for some years past seem to have carried off the best of them." (Huron Relation, 1640, p. 62, Can. edition; p. 127, vol. 19, Burrows' reprint).

If Father Brebeuf's aggregate of 30,000 be an over-estimate, Father Lalemant's of 12,000 in 1639, on the other hand, may have been under the mark, because, while the latter is larger than Champlain's 10,000, it does not show much increase from migrations if allowance be made for the Tobacco Nation, in their nine villages, and so, at least, it must be a very conservative estimate.

Father Bressani, in his Relation of 1653, speaks of eight Huron "nations," (Burrows' reprint, Vol. 38, p. 283). This doubtless refers to the clans or gentes within the whole Huron nation. The clan is the fundamental social division amongst the American aborigines, and while political changes may bring about alterations in the names of tribes, yet amongst Algonquin and Huron peoples they resolve themselves fundamentally into the clan at last, and this is why we find the names of the Huron tribes constantly tending to become those of the clanship animals.

Father LeMercier, writing in 1660, says there had been from 30,000 to 35,000 Hurons, evidently following the former estimates in the Relations of earlier years.

From the foregoing seeming medley of tribal names and numbers of the tribes, it is possible to gather much information, a close scrutiny of which will throw light upon some of the ups and downs through which the Hurons passed during the 35 years in which the French writers who have been quoted had them under observation. There is no need, accordingly, to attribute inaccuracy to any of the statements quoted, although at first sight they may appear to contradict

one another. Thus Father Lalemant's census in the Huron Relation of 1640, (Huron Relation, p. 62, Can. edition; p. 127, Vol. 19. Burrows' reprint), in which he enumerates the villages at 32, and estimates 700 cabins, 2000 fires or about 12,000 persons, has every appearance of being reliable.

Another passage in Father Lalemant's Huron Relation of 1639 throws much light upon the fluctuations in the Huron tribes, and is deserving of careful consideration in this connection:—"In this small extent of country—situated to the east-southeast of a great lake, called by some 'fresh-water sea' (now Georgian Bay)—are to be found four nations, or rather four different collections or assemblages of grouped family stocks, all of whom, having a community of language, of enemies, and of other interests, are hardly distinguishable except by their different progenitors, grandfathers and great-grandfathers, whose names and memories they cherish tenderly. They increase or diminish their numbers, however, by the adoption of other families, who join themselves now to some, now to others, and who also sometimes withdraw to form a band and a nation by themselves." (Huron Relation, 1639, p. 50, Can. Edition; p. 227, Vol. 16, Burrows' reprint).

Evidences of Former Huron Migrations.

Father Lalemant's Huron Relation for 1640, as we have already seen, contained a revised, and doubtless corrected, classification of the Huron tribes by adding the Ataronchronons instead of the Atahotaenrats. His Huron Relation for 1639 also made a few important references to the traditional history of four of the tribes previous to, and about the time of, the coming of the French to Canada. This is almost the only authentic information of any extent gathered direct from the Hurons themselves on the subject of their origin. That writer's words regarding their former history are as follows:—"The general name, and that which is common to these four Nations, in the language of the country is Wendat; the individual names are Attignawantan, Attigneenongnahac, Arendahronons, and Tohontaenrat. The first two are the two most important, having received the others into their country, as it were, and adopted them—the one fifty years ago, and the other thirty. These first two speak with certainty of the settlements of their ancestors, and of the different sites of their villages, for more than two hundred years back; for, as may have been remarked in previous Relations, they are obliged to change their locations at least every ten years. These two nations term each other 'brother' and 'sister' in the councils and assemblies. They are the most populous through having, in the course of time, adopted more families; and as these adopted families always retain the names and memories of their founders, they are still distinct little Nations in those where they have been adopted—preserving thereof the general names, and community of some minor special interests, together with a dependence upon their two special chiefs, one of war and the other of council, to whom the public affairs of their community are reported." (Huron Relation, 1639, p. 50, Can. edition; p. 227, Vol. 16, Burrows' reprint).

Jacques Cartier, during his voyages to Canada in 1534-43, recorded vocabularies of the Indians he found at Montreal, Quebec and the lower St. Lawrence. These vocabularies show that the Indians spoke dialects of the Huron-Iroquois

language stock. The same Indians, which were agricultural tribes, and were at war with tribes dwelling to the south, did not live on the St. Lawrence when Champlain first visited the locality in 1608. Their remnants had doubtless moved farther west, as no traces of them appeared along the St. Lawrence.

Marc Lescarbot, in his History of New France, 1609, (Book 6, Chap. 24, Champlain Society's reprint, 1914, vol. 3, p. 268), after citing Champlain's account, adds explicitly, and doubtless correctly, that it was the Iroquois who exterminated the people of Hochelaga (Montreal), who had been seen by Cartier, and succeeding writers of the history of Canada have followed Lescarbot's account. The period of our written history, therefore, began after the struggle had arisen between Iroquois and Huron tribes, which resulted in the production of migrations of momentous importance.

In each of the tribal territories there are some characteristic remains which throw some light upon their former migrations. For example, a particular pattern of clay pipe occurs upon all the village sites which there is reason to believe belonged to the Cord Tribe. The patterns of pipes often signified the clan or the tribe to which the owner belonged, and so the relics of this kind become a source of information as to the localities of the tribes. It is true, however, that some of the tribes passed over, or sojourned upon, areas occupied later by some other tribe. In parts close to the area described as that of 1640, (i.e., the final disposition of the tribes), this consideration makes the question occasionally somewhat difficult. But farther from it, the lines of migration diverge more widely, the overlappings are fewer, and the courses of the migrations are accordingly more clearly discernible.

The pinch-faced (human effigy) clay pipe is another common pattern which throws light upon former migrations. It is found on village sites of the Tobacco Nation, and also on some sites of the Bear Tribe. As these two communities had formerly been at war with each other, (Huron Relation, 1640) the pattern in question establishes adoption of some portion of one of the tribes by the other, or some kind of migration relations between the two.

Throughout all the area defined as that of 1640, French relics are very abundant, being found at fully eighty per cent of the village sites. Such collateral evidence from their relics corroborates the former movements of the Hurons and the migrations implied in Father Lalemant's Huron Relation of 1639, already quoted. The present example of this kind of evidence, viz., the occurrence of clay pipes bearing particular patterns, seems to indicate the line of migration along which the two original tribes proceeded. Incomplete as this evidence from relics may appear to be, it corroborates the course of events indicated by Father Lalemant.

Another example of the migrations that often took place may be cited. The Wenrohronons had been a small tribe living somewhere near the eastern end of Lake Erie, and situated between the Eries and the Neutrals. According to the Relation for 1639, (p. 59, Can. edition; p. 25, Vol. 17, Burrows' reprint), this tribe was for some time allied to the Neutrals; but, some dispute having arisen between them, the Wenrohronons left their own country in that year and took refuge with the Hurons. The Relation for 1641 (chap. 6) mentions them as living at the town of Khioetoa (St. Michel) in the Huron country.

There is also evidence of an influx from some quarter into the sheltered peninsula of N. Simcoe, between the years of 1615 and 1635.

The aborigines of any country are always found at the corner opposite to the point of entry of their invaders. This was the case with the early Keltic tribes of Britain, the Lapps of North Europe, the Basques of Southern France, and indeed with every race of conquered people known to history. It might therefore be expected that the Hurons would remove as far as possible from their enemies, the Iroquois: and it was in this position—thrust against the northerly limit of land adapted to agricultural pursuits—that they were found by the early French.

These inferences from historical considerations have been fully confirmed by the French relics from village sites, from which it is evident that a removal from the sites of the Counties of Ontario, York and S. Simcoe took place about the time the French first came.

The leading characteristics of the Hurons, and especially their agricultural industry, would lead one to suppose that they came originally from the plains. They built lodges of wood, however, which was not a custom that they could acquire in the treeless region of the plains. Yet even this custom could easily be a later acquisition, for the Indians readily adapted themselves to any new practice that might arise. As an example of this, the Spaniards introduced horses into America, and they became wild on the prairies. The prairie Indians soon brought them into their service and became much better riders and horsemen than the whites, thus proving that Indian habits can be readily adapted to new surroundings and circumstances.

All the evidence seems to point in a general way to the plains of the southwest as ultimately the former habitat, perhaps centuries earlier, of the Hurons, who were above all an agricultural people when compared with the indigenous Algonquins. Their burial practices resembled in part those of the Sioux, to whose language the Huron-Iroquois dialects also had some resemblance.

The late Horatio Hale, however, advanced a theory based upon linguistic inferences, that the Hurons came from the northeast in Quebec Province. ("Indian Migrations as evidenced by Language"—a paper read before the Amer. Association for the Advancement of Science, Montreal, 1882), but this view has not generally received the approval of students of the subject.

The migrations from the St. Lawrence valley, in the Province of Quebec, if such took place, (and as we have already seen it would appear from the earliest written historic records that there was some movement from the east as a result of the Iroquois raids), were in reality of minor importance in comparison with the great movement of the Huron-Iroquois speaking tribes from the southwest, which had brought the Hurons into Canada; and the numbers of the tribes afterward in Huronia who in all probability had reached there from the east were in a minority when compared with the numbers of the two original Huron tribes—the Bear and the Cord.

In historic times, Indians have frequently moved northward into Canada, viz., the northern Iroquois or Senecas in the 17th century, the Six Nations to the Grand River in Brant County, Delawares and Munsees to the Thames, Mohawks to Caughnawaga, St. Regis and the Bay of Quinte in the 18th century, and accordingly we may infer that in prehistoric times migrating tribes usually followed the same course. The earliest tribes, as the earth-works show, had reached this province around both ends of Lake Ontario. The Huron tribes, however, had been in Ontario long enough to become in blood nearly the same

as the Algonquin natives of the soil, and it was only in language that Iroquois and Hurons had any affinities with each other. But their period in Ontario had also been long enough to effect many changes in their language and customs.

Outstanding Features of Huron Village Sites.

Along the sides of the ridges there are many raised lake beaches of former geological times, and the terraces which they left may be clearly seen. Everywhere we see these proofs that what is now land had formerly been lake bottom, and that this change from water to land took place in very recent geological ages. Although at first sight these raised beaches may appear to have little bearing upon our subject, at a closer examination they manifestly possess an intimate connection with the Huron villages.

Beside these old beaches in many places there are swampy patches, often quite narrow, but very wet from springs of water issuing at these lines. Here moisture is kept all the year round, and frequently the springs are so strong that they trickle out from the swampy tracts and form rills or rivulets, flowing onward to the rivers, and, in fact, producing them. It seems that when the old lake surface stood for a time at each of these marks, underground courses of the water were established, so as to let the drainage out of the ground at the level of the existing shore line. The process of forming other similar underground courses at lower levels was repeated as often as the water surface fell and made a new beach line. And now, after thousands of years (the lake level having in the meantime sunk some hundreds of feet lower), these old underground water courses continue to be the grooves in which the natural drainage of the land makes its escape. In other words, the springs have had a tendency to get into ruts, out of which it is not easy to shake them.

Almost invariably at the springs along these lines the Huron aborigines selected their dwelling places, and got their supplies of fresh water. And accordingly, the line followed by an old beach in nine cases out of ten becomes the line along which the inland Huron villages are situated.

Our own ancestors, before the invention of pumps or wells, lived in similar situations. Topley (Journal, Anthrop. Inst. iii. 34-49) shows that in the south-east of England, "along the foot of the chalk escarpment, where the settlers found good water," there is a line of village communities: and that of 125 parishes along the Weald, no less than "119 belong to villages situated at the foot of the escarpment." This resemblance is a proof of the identity of the domestic needs of our own ancestors and the Hurons and not the effects of European (French) influence on Huron customs. To settle near where fresh water was to be found was an indigenous custom among the Hurons. Human needs are much the same in all ages and countries, and will compel widely separated races to act alike under similar conditions.

There is also another important feature of the village sites in Huronia, not hitherto indicated, and which, though highly important, will be merely alluded to in this place. The largest Huron village sites in the country are found there, and they are likewise post-French. It would appear from this that as danger from the invading Iroquois grew greater, the population became amassed into larger villages and towns for safety.

The favorite dwelling place of the Hurons on the hills, nearly always close to an old beach where abundance of spring water could be had, was of fundamental importance. Besides the better security to be found in hilly situations, there was, perhaps, something in the nature of the Huron tribes themselves that required their settlement on hills where the soil and the air were both drier than on the low ground. They always selected for their sites porous or sandy loam with natural drainage. The habitat of the Hurons upon the hills was thus well pronounced in its type. It differed widely from that of another earlier Indian race in parts of the same district, and was in striking contrast with the latter, signs of which occur especially along the lower waters of the Nottawasaga River, near Georgian Bay, the remains of the two races, however, being placed favorably for comparison.

The Huron villages were of all sizes. Those at which bone-pits occur were generally large. When compared with the villages of Europeans, or even with those of modern Indians, the large populations in Huron villages appear to have been huddled together in an extreme degree.

Some of the villages were palisaded. No traces remain of embankments, and it requires some examination to find the palisade of any particular site. But palisading may often be inferred from the position of the site on an isolated hill or on a spur. One cannot think the precaution of selecting a naturally fortified position would be taken without the construction of the palisade itself. Before the introduction of European firearms among the Indians it was desirable that they should build their fortified villages on hills and in high places, the better to secure protection. But since that introduction it has made little difference whether they kept to the hills or not.

The Huron Burial Customs and Their Significance.

The Hurons practised burial customs partly similar to those of the Sioux tribes, thus completing their general resemblance to the Sioux and corroborating the other evidences of their western origin. This was especially true of burial upon scaffolds immediately after death.

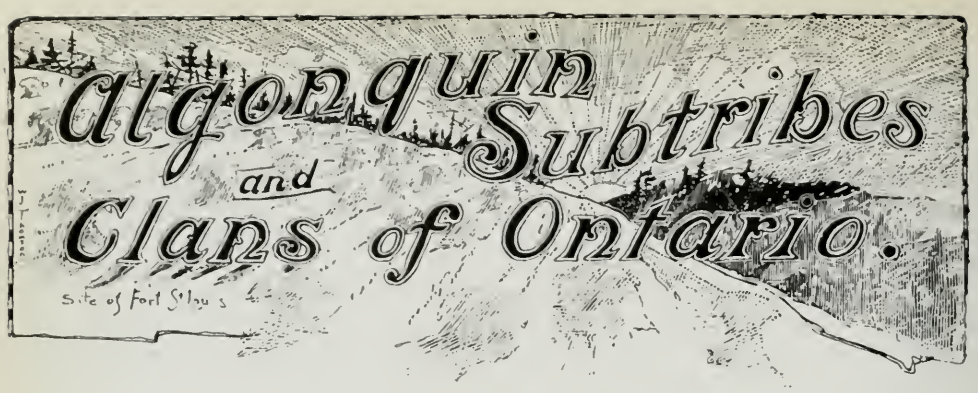
In regard to the bone-pits for the ultimate burials, and their occurrence in the Huron area, a compilation of data between the years 1882 and 1902 showed a preponderance of the bone-pit class of burial in the two tribes described by Father Lalemant as the two original tribes of the Huron confederacy. Out of 58 village sites in the region occupied about 1639-40, as already defined, where the settlers had found bone-pits, 22 were at sites of the Bear Tribe and 11 others at sites of the Cord Tribe. This seems to establish a prolonged period of residence for these two tribes, just as Father Lalemant stated, and it also indicates, as these two tribes lived at the west and south extremities respectively of the row of Huron tribes, that they had come from those directions, and that the bulk of the Hurons had therefore migrated from the south and the west nearer the Sioux.

Not more than half a dozen sites with bone-pits have yet been discovered in any one of the other tribal areas. The collected data also shows that the other tribes had practised single burial methods for the most part. For example, there is an absence of communal burial pits in the east part of Oro Township where the Rock Tribe lived, and such pits are not numerous in Orillia Town-

ships, (N. and S.). This is also true of the sites in the Balsam Lake district, according to the researches of Col. Geo. E. Laidlaw. This would seem to establish some affinity between the Rock Tribe and the dwellers at the Balsam Lake sites, the Rock Tribe having perhaps moved from the Balsam Lake region to the west of Lake Couchiching at an earlier date.

The Atahotaenrat district also shows single graves. While this tribe, in the historic period, consisted of one town, it had perhaps been moved, like other Huron towns, every few years, for sanitary reasons, and with each of the sites in that tribe's territory, there is, instead of the usual communal ossuary or bone-pit, a cemetery of isolated graves. In this respect they also appear to have differed from the two leading Huron tribes, who adopted the ossuary mode almost to the exclusion of every other mode of burial. One small bone-pit, however, came to light in this tract in 1895 (Ont. Arch. Report, 1894-5, p. 42), yet among its contents there were relics of French manufacture.

For the most part Huron crania have a beautiful form, many of the skulls showing fine symmetry in their outlines. This is perhaps partly due to cradle-board compression in infancy. And here again we encounter another resemblance to the Siouan tribes who practised fore and aft compression of the infantile head, although their bandages produced more angular shapes than amongst the Hurons.



Introductory Remarks.

The early history of the exploration of our Province, and of the Indian tribes encountered by Champlain, Radisson, Nicolet, Perrot and the Jesuit missionaries to the Hurons and Algonquins, is full of fascinating pages, of pathos wedded to romance and to a religious heroism, unsurpassed in the annals of North America.

The rollicking, dare-devil *coureur de bois* or bush-ranger, the trapper, the romantic and daring explorer occasionally a man of courtly grace, of unsatisfied ambition and always of reckless courage, the voyageur and the fearless black-robed missionary consorting with the tribes, instructing, blessing, assuaging and expiring in their midst, have passed away. But the story of the courage of the trapper, the heroism of the explorer and the zeal, the self-effacement and sacrifice of the missionary will ever appeal to the imagination and awaken human interest while men continue to admire heroic efforts and applaud the deeds of the good, the noble and the brave.

When searching for knowledge on the names, the hunting grounds and characteristics of the sub-tribes and offshoots from the parent stock, Algonquin or Huron, our sources of information are limited. And to obtain this information we are constrained to examine every page of the letters or *Relations* of the early missionaries, who early in the seventeenth century dwelt with or visited the sub-tribes scattered here and there in what is now the Province of Ontario. Being men of trained intellect and observation these devout missionaries recorded their impressions of and experiences with the tribes in letters remarkable, under the conditions and circumstances, for clearness of expression and simplicity of style. Before we advance further in our study it will be instructive and interesting to learn something of the origin and the history of these missionary letters.

The practice of sending annual or semi-annual reports from foreign mission fields was inaugurated by St. Francis Xavier in the sixteenth century, when he made known to his friends in Europe the progress of his work and the condition of religion in India and Japan. He not only mailed, himself, most interesting letters from abroad but he recommended his brothers in religion to do so. Writing April, 1552, to Gaspard Baertz, who had charge of the mission at Ormuz, India, he requests him "to send letters periodically to the college at Goa, in which you will mention the various labors you undertake to secure the increases of divine glory, the methods which you follow and the spiritual results with which God crowns your feeble efforts." He also wrote June, 1549, to the same effect to Francesco Perez and Diego Pereira.

Four years after the first mission for the conversion of the Canadian Indians was opened in Nova Scotia, in 1611, Father Biard sent to France the first letter of the series known as *Les Relations de la Nouvelle France.*

The series were continuous, with occasional interruptions, down to 1673. However, the letters were not made public property until the year 1632, when the "Bréves Relations du Voyage de la Nouvelle France" of Father Paul Le Jeune appeared. From this time, down to October, 1673, Sebastien Cramoisy, the King's Printer at Paris, annually issued a vellum bound, duodecimo volume of the Relations. Altogether, Cramoisy published forty-one volumes. In 1858 the Canadian Government commissioned the Abbès Ferland, Laverdière and Plante to re-edit the Cramoisy series, collect all the scattered and independent manuscripts and revise them for publication. When they had accomplished their mission the reprint—now very rare—was published, 1858, by the authority and under the auspices of the Canadian government. These Relations were issued in French in three quarto volumes.

But the most complete and voluminous edition ever published was begun (1896) and completed (1901) by the Burrows Brothers of Cleveland, Ohio. This monumental work of seventy-two volumes was edited by the scholarly Reuben G. Thwaites, assisted by a corps of expert translators. In this edition are incorporated the original French, Latin and Italian texts with the English translations, and most valuable notes, portraits, maps and autographs. The title of this invaluable publication is "The Jesuit Relations and Allied Documents, Travels and Explorations of the Jesuit missionaries in New France, 1610-1791."

This brief condensation of the history of the *Relations* will give the reader an idea of the vast amount of letters written by the missionaries and will also show how scattered, until our own time, were the primary sources of information and how difficult it was in the past for students or even scholars to have access to them. It is impossible to exaggerate the value and authority of these letters when one has to deal with the character, habits and condition of the early tribes of our Province. "I should add," writes Francis Parkman in his preface to "The Jesuits in North America" "that the closest examination has left me no doubt that these missionaries wrote in perfect good faith and that the Relations hold a high place as *authentic* and *trustworthy* documents."

In their extraordinary bulletins the Jesuit missionaries seemingly omitted nothing of importance bearing on the mental, physical and moral qualities of Hurons and Algonquins. Their narratives and letters include essays on native manners, descriptions of the land, of the customs, religious rites and ceremonies of the tribes. In this incomparable collection are included dissertations on botany, geology, zoology, ethnology and on tribal languages and dialects. Their writings are of inestimable value to the students of prehistoric man in Canada and to scholars who have enlarged the sphere of research and who are now exploiting the aboriginal past.

We do not need to remind the reader that, practically, all we know of the minor clans hunting through the forests of Ontario in the sixteenth and seventeenth centuries is to be found only in the letters sent to France by the early missionaries.

Most of the minor tribes of Ontario which, in the sixteenth century formed, collectively, a numerous body, have either entirely perished or they are fast disappearing. It would be idle to search for the causes which doomed them to annihilation or contributed to the great reduction in their numbers. Doubtless

the gradual encroachment of civilized man upon their hunting grounds, their inability or unwillingness to conform to new and untried conditions, alcohol in the last century, tuberculosis, diseases introduced by trappers, hunters and traders and scarcity of game contributed with cumulative force to their almost total extinction.

Their numbers are decreasing year by year and as they are apparently unable or unwilling to conform to the ways of the white man, they will, in time, become but a memory. Before they entirely perish it is well to inscribe their names in our Provincial annals so that they may live in the memory of generations yet unborn.

The Abittibi.

The Abittibi were an Algonquin tribelet who, in the time of Champlain, dwelt on the shores of Abittibi lake. Their name appears for the first time in the *Relation* of 1640. We again encounter them in the *Relation* of 1660, in which it is recorded that the Abittibi, and a band of Algonquins visiting them, were ambushed by an Iroquois war party and many of them slaughtered.

Chauvegnerie (1736) was of the opinion that the Abittibi who, in his time, were able to send one hundred and forty warriors against the enemy, were identical with the Têtes de Boule, visited by French traders early in the eighteenth century. Chauvegnerie is probably right when he classes the Abittibi with the Têtes de Boule, for the totem of the two clans, the partridge and the eagle, were the same.*

The Boules, the Temiscamings and the Abittibi had an interesting legend which accounted for the origin of man and told how the sun, moon and stars came into existence. They retailed a story of the flood which destroyed all men and animals, save the eagle and the partridge.

The eagle, as the tradition was handed down to them, was a witch bird. He could change himself at will and put his feathers off and on like a garment. When the flood had gone down he looked about for a mate of his own kind, but could not find one. At last, seeing a partridge, he turned himself into another partridge. Then he and the partridge mated, and from these two come male and female Indians, who increased in numbers till, in time, all the land was peopled with Indians.

In 1669 the Abittibi united with the Temiscamings and fought on the side of the French when, in 1691, the English General Schuyler attacked them. Noel Chauvin, the half-breed trader, records that when a band of Abittibi accompanied him to Iroquois Falls and for the first time saw a steamboat, they thought it was a living giant—a demon—and took to the woods. Coming back and again looking at it, they called it a fire canoe and cried out that it was carrying, to infect them, a smallpox manitou or some spectre of disease. To ward off the danger they pulled up certain native plants which they held before their eyes as they gazed

*The Tabittibis are one hundred warriors. They have for device an eagle with the partridge. At the mouth of the Temiskamingue there are twenty warriors and, at the head of the Lake, twenty domiciled. These Indians are what are called Têtes de Boule who, in the Northern country, amount to over six hundred.

New York Colonial Manuscripts IX, p. 1053.

The Abittibis and the Tetes de Boule came to this river (Ounepigon) also. Some have informed me that the first have for arms, the Partridge and the Eagle. I have already stated that they are in all one hundred warriors. Rel. p. 1054, B. Ed.

on the steamboat, believing the plants would protect them from the evil *oki*. They went wild over the phonograph when they first heard it and gave a beaver skin to hear a single tune.

When they gazed for the first time on a negro they advanced all kinds of theories as to what made him black and when they saw a man with a wooden leg they looked upon him with wonder. Another awful sight was a man with a wig who, they thought, had power to scalp himself and return the scalp to his head when he wished. But a still greater marvel was the storekeeper, who had a set of false teeth.

The warriors flocked to the store to see the man remove his teeth and their amazement knew no bounds when they wildly gazed upon him and saw him take out of his mouth a set of upper and lower gums and then throw them in again. Keronwe, head of the band, shouted in Algonquin to his companions, "This fellow is a sorcerer and ought to be killed." The Indians gathered from many miles to see this wonderful performance, and the storekeeper made a fortune out of his magic teeth.*

Infanticide was not uncommon among the Abittibi. Twins were believed to bring bad luck to the family and created a suspicion that the wife was not faithful to her husband.

When it could be done safely one of the twins was killed so that the husband might not know of the dual birth. The ordinary method of disposing of the child was to stuff its mouth with moss or grass, carry it by night into the woods and bury it. This was done by a female friend or relative of the mother.

The Abittibi are gradually fading away and in a few years will be but a memory. They number to-day, including half breeds, about two hundred and fifty souls.

The Aondirons.

The Aondirons were a subtribe, Attiwandarons or Neutrals of the Niagara Peninsula. Their village was in a forest stretching well into the hunting grounds of the Hurons. *The Relation* of 1648-9 records that, in 1647, a band of Senecas, with whom the Aondirons were at peace, visited the village and were hospitably entertained by the Aondirons. That very night, when their hosts were sleeping, the Senecas fell upon them and slaughtered the men, women and children. There is no subsequent mention of them in the early records. The Aondirons differed from all other Neutral clans in their method of honouring their distinguished warriors. The Neutrals gave scaffold burial to all their dead, but when a great chief of the Aondirons, who had distinguished himself in an engagement with the enemy, was killed on the battlefield and his scalp or war lock unlifted, he was thought to be singularly favoured by some powerful protecting spirit. Wrapped in a rich blanket-shroud, his body was suspended from the highest branch of the loftiest tree in the forest. His face was painted a brown red to simulate life; his pipe and weapons were fastened to his shroud and his shield and war bonnet were

*Lake Abittibi, named from the tribe, is 833 feet above sea level. When, in 1686, De Troyes, with one hundred French Canadians, including the three Le Moyne brothers of Montreal, was on his way to attack the English forts at Rupert and Albany rivers (Hudson Bay) he passed up the Ottawa and, swinging northward to Lake Temiscaming, passed by a chain of small lakes and rivers to Lake Abittibi. Here, on his return from his victorious expedition, he built a small fort to form one of a chain of forts the French intended to construct between Montreal and Moose River. The Abittibi River, which De Troyes followed, unites with the Moose River, near the discharge of the latter into James Bay.

suspended from a convenient limb of the same tree. The tree holding the body was deemed to be sacred against intrusion of any kind for six moons. When the last of the moons had waned two warriors were despatched to examine and report on the condition of the chief's body. If the remains were intact, a council was summoned when the dead warrior was proclaimed to be a great spirit chief in the land of shades and the protector of the braves of the clan when engaged in battle with their enemies.

The Kichesipirini. This clan was known to the French missionaries and *coureurs de bois* as Algonquins, or savages of the Island. They were also called *Batuib de l'Isle* because their principal village was on Allumette Island. They were known among the Hurons as Ehonkehrononons. Father Gabriel Lalemant —Rel. 1639—always used their Huron name when he had occasion to mention them. They were closely associated with the *Weskarini* who dwelt a short distance below Allumette Island on the north side of the Ottawa river. The two probably formed one tribe, and the "Petites Nations" mentioned by Champlain possibly included both clans.* *Le Riviére des Petites Nations* derived its name from these Algonquins. In Champlain's writings and in the Jesuit Relations they are referred to as typical Algonquins, superior in intelligence to all other Indians encountered by the French, and were always classified honourably as Algonquins of the Island, a classification first introduced by Champlain.

Their position on the Ottawa river gave them a commanding influence with the Hurons and other western tribes. The river on both sides of their island was obstructed by dangerous rapids and falls and when the upper tribes, trading with the French at Montreal and Three Rivers, approached Allumette they were forced to land and carry their canoes and furs quite a distance to safe water. The Allumette Algonquins demanded and received toll, grudgingly, from the Huron and Ottawa traders passing down the river to the French fur posts.†

We read in the Relations that, in the year 1645, they struck a peace with the Onandagas. It is not recorded by whom the peace was broken, but, in 1649. the Iroquois invaded their territory and almost annihilated them. The remnant fled northward and the name disappeared from our early annals. They were probably received by their kinsmen the Ottawas, or the Ojibways.

The Algonquins of Allumette retained a tradition of the Noachic flood closely affiliated with the Sioux legend of the great deluge. They claimed that in the beginning, the earth was inhabited by men and women of great size. They were so strong and swift of foot that when hungry they ran down a moose and, taking it under one arm, tore off a leg and devoured it as they ran. Because of their swiftness and great strength they never prayed to the great Manitou who made them and all things. When he sent thunder and lightning they laughed at them and had no fear.

Now the Great Spirit became angry with them and sent a great rain upon them. When the valleys were all flooded the giants retreated to the high lands.

*Mr. S. E. Dawson, however, contends that Allumette Island "was the stronghold of the greater Algonquins as distinguished from *La Petite Nation* who hunted near the site of the present capital—Ottawa." "The St. Lawrence," p. 268.

†"This Island is in the great River Ottawa, and the savages who inhabit are very haughty. The Hurons and the French now staying in the Huron country, wishing to come down here, pass first through the lands of the Nipisiriens (Nipissings) and then come alongside this Island, the inhabitants of which cause them every year some trouble, by demanding toll from all the canoes of the Hurons, Ottawas and French." Rel. Vol. XX, p. 275.

But when the waters threatened to cover these lands the men, and women carrying their children, fled to the hills and at last to the highest mountains. Now the rain still kept falling and the waters rising till the giants, having no place to go to, were all drowned. Then the rain ceased to fall and where the waters no longer covered the earth, the Great Spirit made a new race of men and women, but the men of this new race are smaller and weaker.

It appears, from Champlain's account and other early records, that the Algonquins of the Isle were the most trustworthy and intelligent of all the Algonquins met by the French. They never broke a contract made with the French officials, or traders. Their pledged word could always be depended upon. They belonged to that superior class of savages of whom Chateaubriand writes:

"We may safely affirm that the better specimens of savages are much superior to the lower examples of civilized people."*

The Monsoni. An Algonquin clan carrying the totem of the northern Ojibways. They are mentioned for the first time in the *Relation* of 1671. We learn, from the *Relation* of 1672, that they drifted to the north and were then domiciled near the mouth of the Moose River at James' Bay and were known to the traders and Hudson Bay trappers as the *Moose River Indians.* Charlevoix contends that the Monsoni and the Aumonesonks who were present at the Great Council held, 1671, at Sault Ste. Marie, when the French claimed sovereignty over the vast region of the great Lakes, were one and the same tribe.

In 1693, a band of the Monsoni were settled on the west bank of Rainy River near where it flows into Rainy Lake. Their totem was the moose, which would lead us to infer that at sometime early in the seventeenth century, they had separated from the Chippewas of Lake Superior. They number to-day, all told, about 300 souls.

The Temiscamings. Early in the sixteenth century the Abittibi and Temiscamings formed, if we may trust Lahontan's statement, one tribe. They were friends of the French and fought with the Abittibi against General Peter Schuyler when he made war on the French in 1691. They are settled to-day at the head of Lake Temiscaming, and number about two hundred and forty, of whom one half, at least, are half-bloods or three-quarters bred.

An interesting legend has come down to us from the time the band first settled on the shores of Lake Temiscaming. The Lake is a delightful sheet of water and is shadowed and bordered by evergreen pines, by maples, quaking asps and birch trees. In primitive times, before the axe of the timber cutter defiled its beauty, Lake Temiscaming was one of the most picturesque and beautiful inland basins reposing in a Canadian wilderness. Surrounded on all its shores by a luxuriantly wooded forest whose trees were morning and evening mirrored in its waters, the lake rested in a weird isolation and silence broken only by the cry of the loon or the swish of an Algonquin's paddle. It was the custom of the Algonquin camping on its western shore to assemble, at midnight, once every month when the moon was at its full. Then, after a sacrifice was offered to the manitou of the Lake, a spectral canoe filled with spirits of the departed warriors

*Mr. A. F. Hunter, M.A., Treasurer of the Ontario Archæological Society, who examined the remains of former Algonquin villages on the Ottawa River and its tributaries, is of the opinion that members of the clans of the *Weskarini* and *Kichesipirini* dwelt for many years in the present county of Renfrew. Quite an interesting exhibit of relics found in that county is now under glass in our Provincial Museum, Toronto.

of the tribe left the eastern rim of the lake and, crossing to the west, gazed for a few moments on the assembled warriors, then, dipping again their paddles, disappeared from sight.

The spectres spoke not, they stirred not, they looked not around but earnestly gazed on the living. They sat rigid and silent and when spoken to answered not a word. So visibly did the great canoe and its ghostly occupants appear that the faces of the dead warriors were plainly distinguished and relatives and friends were recognized. For many moons, the ghosts, always sailing from the east, were seen by the living standing on the western shore.

When, in 1686, De Troyes and his voyageurs camped for a day on the eastern shore of the lake, the phantom canoe and its ghostly warriors were seen no more.

Night after night for many months watchers waited on the western shore but no canoe appeared. A council of the tribe was summoned at which shamans, autmoins, war chiefs and patriarchs assisted. Then after a long silence the calumet—the pipe of peace—was passed around. When all had smoked, Piskaret, shaman of the tribe, arose and said:

"War chiefs, autmoins, warriors all, our dead will never be seen again. The coming of the white man has cast a spell upon the waters and the spirits which came from the Happy Hunting Grounds will never again appear, for they know that the white man will return soon, possess our lands and drive us onward to where the sun, every night, passes from our sight."*

Keinouche

A subtribe of the Ottawa—so-named from *Kinozha* ('Pickerel'). The Jesuit Relation of 1640 locates them under the name Kinounchepirini south of the isle of the Algonquins in the Ottawa river. This would place them, if taken literally, some distance east of Lake Huron. The Relation of 1643 which places them on Lake Huron is probably more nearly correct. In 1660 when visited by Father Menard they were at Keweenaw Bay, Mich. They returned to Mackinaw in 1671 and from these moved to Manitoulin Island. This family in its wanderings illustrates the characteristics of many of the Algonquin subtribes. Algonquin bands travelled from the extreme east of the American continent to the Rockies in the west and from the head waters of the Saskatchewan in the north to the head waters of the Gulf of Mexico. These wandering bands were usually free from attack and were allowed to go from one tribe to another unimpeded.

Amikwa

An Algonquin tribe so-called from *amik*, 'a beaver.' They were first known to the early French travellers when they resided on the north shore of Lake Huron

*There is a striking similarity between this Algonquin legend and that of the French Canadian *La Chasse Gallerie* which furnished the poet Drummond the suggestion for his "Phil-o-rum Juneau." Once every year, on New Year's Eve, a phantom canoe bearing the souls of the *voyageurs* who had perished in the *pays d'en haut*—in the northwest—visited Three Rivers. As the canoe floated over Montreal the spectral *couriers de bois* sang of their forest loves and as it approached Three Rivers the spectres, before descending, chanted "Le Canayan Errant," the favorite song of the *voyageurs* and *couriers de bois* or forest rangers. After Quebec surrendered to General Wolfe the phantom canoe and its ghostly occupants were never again seen by mortal eyes.

opposite Manitoulin island. They are mentioned in the Jesuit Relations as Amikouai as early as 1636. In 1673 they claimed to be allies of the Nipissings and in the early days before the advent of French traders they were reported to have rendered themselves masters of all the other tribes in these quarters. At this time they inhabited the shores of Lake Nipissing, but as with many other tribes, diseases introduced by the traders decimated their numbers and soon the ever-conquering Iroquois compelled the remainder of the tribe to betake themselves to the south shore of Lake Superior and to Green Bay in Michigan.

Achiligouans

An Algonquin Indian band, which between 1640 and 1670 resided on the north shore of the Georgian Bay and in the Relation of 1670 they are said to have been attached to the Jesuit mission at Sault Ste. Marie, but the strong probabilities are that they only went there to fish. They were possibly a Nipissing band; their trade relations were largely with the Crees. Hewitt thinks the Naskasinik mentioned in the Relations for 1657-58 may possibly be the same as the Achiligouans. In the Relations they are given as a division of the Ottawas.

Nopeming

A northern branch of the Chippewa who resided in New Ontario north east of Lake Superior and west of Lake Nipissing. They were known to many of the surrounding tribes as men of the woods. In the early days when undaunted *coureurs de bois* and indefatigable priests of the Jesuit order visited them they were known to frequently resort to the Sault for the purpose of securing food.

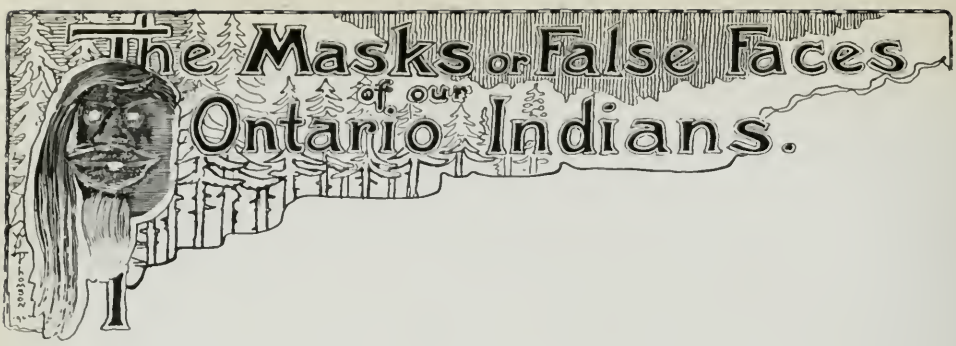
Nikikouek

This little known Algonquin subtribe formerly dwelt east of the Missisauga among the rock caverns on the north shore of Lake Huron. They usually, like other bands, deserted their camp sites twice a year to hunt and fish along the lake for sturgeon and other fish. When, in 1653, an Iroquois war-party composed of 120 warriors made an attack upon them and their allies the Saulteurs and Missisaugas, the Nikikouek were almost annihilated. Thus we see that Iroquois warriors in those early days penetrated through New Ontario as far as the Sault.

Marameg

(from *Man-um-aig* Chippewa for "catfish.")

At the dawn of Ontario history this band resided in the upper lake region and were even then undergoing a process of disintegration. Dablon gives the first notice of them in the Jesuit Relation of 1670, at which time he states that they resided on the east portion of the north shore of Lake Superior, and were then in close union with the Sauteurs or Chippewas of the Sault. They are mentioned under the name *Malamechs* in the Proces-verbal of the Prise de Possession in 1671 as being present at the great conference on that occasion.



Back to the ages at whose birth we can only guess, back to the centuries when the Hittite Empire was at the zenith of its power, back to the time when the vast pyramids and palaces of Central America were vying in magnitude and splendour with their sister structures in Egypt, back to the time when palaeolithic man, in the caves of southern Europe, was making his rock paintings and illustrating masks—since these remote eras the use of masks has been the common property of all nations and tribes the world over. Their origin can only be dated back to the first histories of man—probably carried from the earliest civilizations of the far east and Asia Minor to the Island of Atlantis, and then transmitted to the various nations of the western hemisphere.

The primal use of masks is very uncertain. In the days of palaeolithic man the mask was used very extensively for the purpose of deceiving the animals they were hunting, and thus they more readily secured their game. As ages went on, the mask was used to shield the face, then, in addition to this, it became a religious and then a theatrical necessity. The North American Indians adopted ferocious looking masks, which were supposed to frighten their enemies, and special devices were invented for the purpose of heightening the warriors' terror-inspiring powers, until the defensive idea was all but obliterated.

Dall, in the Bureau of American Ethnology, states that "with the advance of culture, in its feeble beginnings, humorous perceptions are well known to be of relatively slow development. However, we can perceive that, with the growth of supernaturalism, the emblem of the hero, already merged in the hero-myths, would, from the first, be associated with any formal recognition by the community of its relations to the supernatural. Thus masks would take their place among religious paraphernalia, not only of the community in its general direct relations to the supernatural, but in the probably earlier form of such relation through an intermediary individual, in the form of a shaman or his logical predecessors in culture."

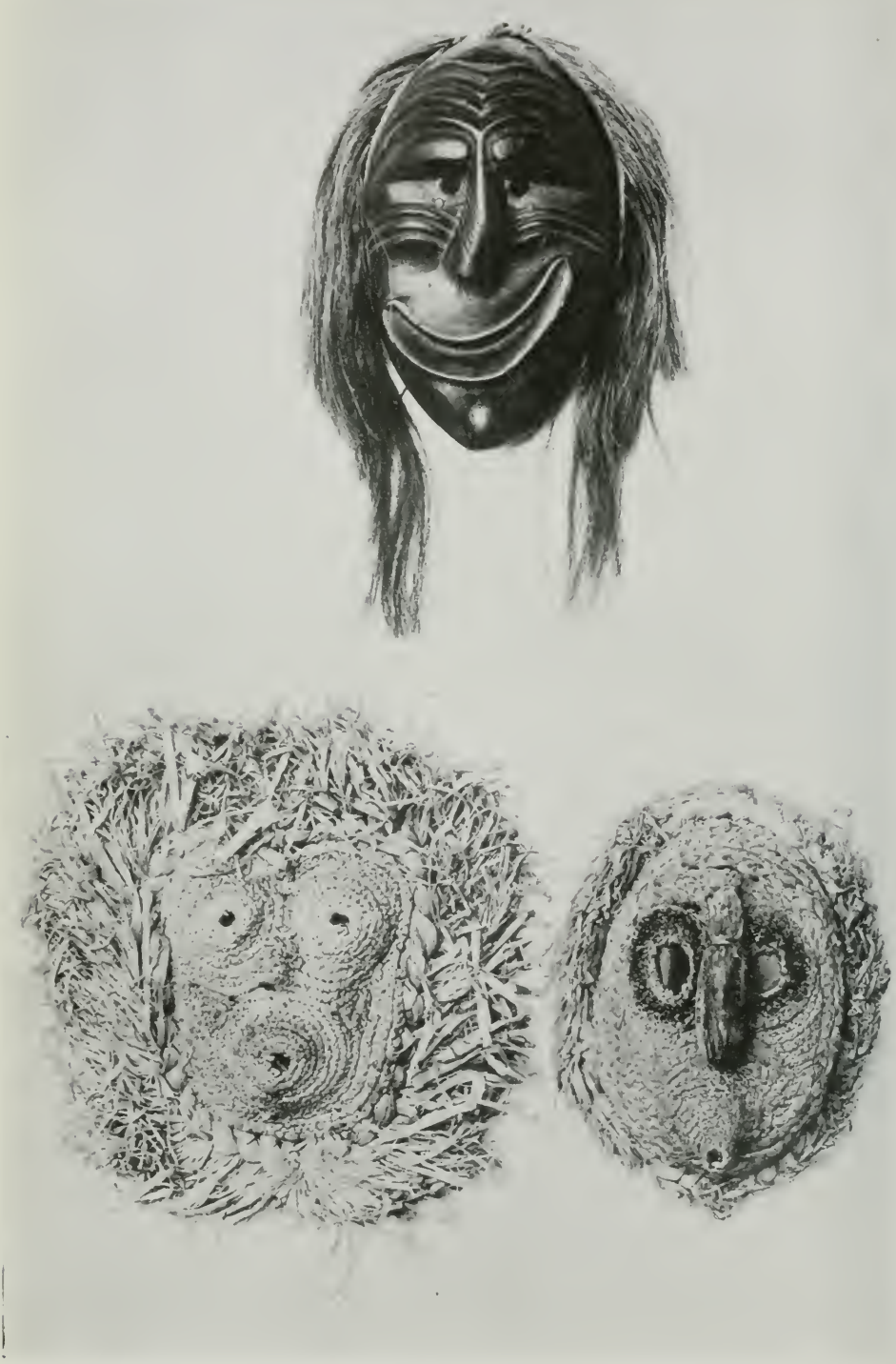
Worship, as we understand it, is not a proper term to use in the description of the Indian's methods of approaching his supernatural beings. It involves much which is unknown to him and implies the existence of that which is foreign to his conceptions. Still, until some better nomenclature, more exactly defining his methods, is suggested, these terms, from their convenience, will still continue in common use. The use of the mask was general amongst the American Indians from Patagonia to the Arctic Circle, even the enemies amongst the ice-bound regions of the north had their own peculiar forms of masks. The Peruvians of South America apparently used masks from much the same motives as prompted their use in Mexico and amongst the various tribes of North America. The

origin of the use of masks among our Indian tribes dates back to pre-historic times, and like the flint arrowhead and knife, the stone axe, and other artifacts found amongst all the early tribes the world over like conditions and wants produced similar articles, or else one great centre, of which we now know nothing, may have been the great distributing centre for the dissemination of the knowledge of how these articles were manufactured and the uses they were applied to. Amongst all our Indian tribes in Ontario masks were used largely for ceremonial purposes chiefly amongst the Hurons, Tionnontates and Attiwandarons; but not to such a great extent by the various Algonquin tribes, who occupied the northern portion of this province (Ontario). The Iroquois made use of masks very extensively and even to this day they can be seen on the reserve at Brantford.

Lewis H. Morgan, writing in reference to masks, states—"The tendency of the Iroquois to superstitious beliefs is especially exemplified in their notion of the existence of a race of supernatural beings, whom they call False-faces. This belief has prevailed among them from the most remote period, and still continues its hold upon the Indian mind. The False-faces are believed to be evil spirits, or demons, without bodies, arms, or limbs, simply faces, and those of the most hideous description. It is pretended that, when seen, they are usually in the most retired places, darting from point to point, and, perhaps, from tree to tree, by some mysterious power; and possessed of a look so frightful and demoniacal as to paralyse all who behold them. They are supposed also to have power to send plagues and pestilence among men, as well as to devour their bodies when found, for which reason they were held in the highest terror. To this day there are large numbers of the Iroquois who believe implicitly in the personal existence of these demons.

"Upon this belief was founded a regular secret organization, called the False-face band, members of which can now be found in every Iroquois village both in Ontario and New York State, where the old modes of life are still preserved. This society has a species of initiation, and regular forms, ceremonies, and dances. In acquiring or relinquishing a membership, their superstitious notions were still further illustrated, for it depended entirely upon the omen of a dream. If any one dreamed he was a False-face (Gá-go-sá), it was only necessary to signify his dream to the proper person, and give a feast, to be at once initiated; and so any one dreaming that he had ceased to be a False-face, had but to make known his dream and give a similar entertainment to effect his exodus. In no other way could a membership be acquired or surrendered. Upon all occasions on which the members appeared in character, they wore masks of the kind represented in the figure, the masks diversified in color, style, and configuration, but all agreeing in their equally hideous appearance. The members were all males save one, who was a female and the mistress of the band. She was called Gá-go-sá Ho-nun-nas-tese-tá, or the "Keeper of the False faces:" and not only had charge of the regalia of the band, but was the only organ of communication with the members, for their names continued unknown.

"The prime motive in the establishment of this organization was to propitiate those demons called False-faces, and, among other good results, to arrest pestilence and disease. In course of time the band itself was believed to have a species of control over diseases, and over the healing art; and they are often invoked for the cure of simple diseases, and to drive away or exorcise the plague, if it had



IROQUOIS MASKS.
Lower ones made of corn and used in Cornplanters' Ceremony.

actually broken out in their midst. As recently as the summer of 1849, when the cholera prevailed through the continent, the False-faces, in appropriate costume, went from house to house at Tonawanda, through the old-school portion of the village and performed the usual ceremonies prescribed for the expulsion of pestilence.

"When any one was sick with a complaint within the range of their healing powers, and dreamed that he saw a False-face, this was interpreted to signify that through their instrumentality he was to be cured. Having informed the mistress of the band, and prepared the customary feast, the False-faces at once appeared, preceded by their female leader and marching in Indian file. Each one wore a mask, or false face, a tattered blanket over his shoulders, and carried a turtle-shell rattle in his hand. On entering the house of the invalid, they first stirred the ashes upon the hearth, and then sprinkled the patient over with hot ashes until his head and hair were covered; after which they performed some manipulations over him in turn, and finally led him round with them in the "False-face dance," with which their ceremonies concluded. When these performances were over, the entertainment provided for the occasion was distributed to the band, and by them carried away for their private feasting as they never unmasked themselves before the people. Among the simple complaints which the False-faces could cure, infallibly, were nose-bleed, tooth-ache, swellings, and inflamation of the eyes."

Amongst the Hurons masks were in common use most frequently for ceremonial purpose; vol 13, p. 263 Jesuit Relations, describes a dance "performed for the recovery of a patient. All the dancers were disguised as hunchbacks, with wooden masks which were altogether ridiculous, and each had a stick in his hand. An excellent medicine forsooth! At the end of the dance, at the command of the sorcerer, all these masks were hung on the end of poles and placed over every cabin, with straw men at the doors, to frighten the malady and to inspire with terror the demons who made them die. Their purpose was, according to what they told us after, to frighten the disease and put it to flight. In addition to those wooden or straw masks they frequently masked their faces by painting."

The Jesuit Relations, Vol. 5, describes the process as viewed by them. Le Jeune states that "there were some whose noses were painted blue, the eyes, eyebrows, and cheeks painted black, and the rest of the face red; and these colours are bright and shining like those of our masks; others had black, red, and blue stripes drawn from the ears to the mouth. Still others were entirely black, except the upper part of the brow and round the ears and the end of the chin; so that it might have been truly said of them that they were masquerading. There were some who had only one black stripe, like a wide ribbon drawn from one ear to the other across the eyes, and three little stripes on the cheek."

Paul Kane, in his book "Wanderings of an Artist," spending, as he did, some years in the western and north-western prairie sections of British North America, crossing the Rockies and visiting many of the Indian tribes on the Columbian river and Pacific Coast during the middle of the nineteenth century, thus describes a mask dance in British Columbia amongst the Clal-lum Indians who resided where the city of Victoria now stands. "These Indians", he states, "have a great dance which is called 'The Medicine Mask Dance'; this is performed both before and after any important action of the tribe, such as fishing, gathering camas, or going on a war party, either for the purpose of gain-

IROQUOIS MASKS.

Fig. No. 30594. Fig. No. 13096. Fig. No. 37628.

ing the goodwill of the Great Spirit in this undertaking or else in honour of him for the success which has attended them. Six or eight of the principal men of the tribe generally medicine-men adorn themselves with masks cut out of some soft light wood with feathers, highly painted and ornamented, with the eyes and mouth ingeniously made to open and shut. In their hands they hold carved rattles, which are shaken in time to a monotonous song or humming noise, which is sung by the whole company as they slowly dance round and round in a circle."

Prof. Michaelis, in describing the shaft graves at Mycenæ, states that the gold vessels found in them were so numerous as to justify the Homeric Fame of Mycenæ, "rich in gold." A little gold sanctuary of Aphrodite, resembling a high altar with two doves thereon, contained some gold cups which graphically recalled Homer's description of the "Gold Masks," which, according to a widespread custom, covered the faces of the dead.

RED PAINT BURIAL IN ONTARIO

On the property of Mr. J. A Harvey, known as "Harcroft Bird Sanctuary", situated on the west side of High Park in the city of Toronto—and immediately north of Grenadier Pond, there is a little bit of unspoiled wilderness very much as nature left it. Romantic valleys, the haunts of birds, towering prominences shaded with lovely trees, overlooking Lake Ontario's blue waves, a panorama of scenery sweeping the Humber Bay from the Island to the breezy points of Mimico and beyond. In January, 1921, on the brow of one of these high prominent sand hills, running south from Bloor street, while excavatings were being made for a road, an ancient Indian ossuary was exposed to view. Mrs. Harvey graphically describes the finding of the bones. The weather being mild, road-making was early carried on. One afternoon, while the teams and scrapers were busily working around the roots of what eventually was discovered to be a stump of tremendous size, the men began to notice peculiar patches of red sand, which was particularly noticeable in the native white sand of the district, and underneath this stump the bones were unearthed. The skeletons were in the usual sitting posture so frequently adopted by Algonquins. There were in all about eight or ten skulls. Many of the long bones were much decayed, and the smaller bones of hands and feet were absent. Many of the skulls and bones, when they were exposed to the air, crumbled into dust. Two groups of smaller bones were found about thirty feet north of the group around the base of the stump; they, too, being surrounded by the same red patches of sand, and, likewise, about three feet below the surface. The workmen found nothing but a small pierced amulet and a copper artifact. There was also a lump of red hematite found among the bones. All of the bones were well covered with hematite mixed with sand. The question here at once arises as to the connection between the Red Paint People of the Penobscot valley in the State of Maine and the Red Paint mode of burial in this province. Moorehead is of the opinion that this culture developed locally and that it is very ancient. The graves opened in the state of Maine in no case presented any entire bones, the artifacts surrounding the bones with the red paint being all that was left. In a few cases small portions of the bone were found. In the Harvey site the bones were in a fair state of preservation—small bones all absent—many of the skulls were so old that they crumbled. The hematite was well mixed with the sand within the skulls. The bones found at a distance from the ossuary were also well covered with red hematite. The aborigines representing the Red Paint culture in the State of Maine seem to have selected a sandy or gravelly knoll or the end of a ridge, in which to deposit the osseous remains of their dead. Such was the case in this grave-yard overlooking Grenadier pond and Lake Ontario. Was this an isolated family who had made their way from the Atlantic seaboard to the western shores of Lake Ontario and carried with them the paint burial form of the ancestors? The burials took place long before Dekanawida and Hiawatha formed the league of the Iroquois—probably at a time when the Algonquin race had their camping and hunting grounds on the banks of the St. Lawrence and extending westward along the northern shore of Lake Ontario.

SCENE OF OSSUARY—"HARCROFT BIRD SANCTUARY."

The striking feature of this culture is the great preponderance of powdered hematite which, in the case of the cemeteries in Maine, seems to have been brought from the natural deposits near Katahdin in Central Maine. The artifacts found in the graves of the Red Paint People of Maine are quite different from the Algonquin artifacts. The utter absence of artifacts, common to Indian graves elsewhere in the United States or in Canada, is characteristic of these Maine sites. In them never have been found pipes, grooved axes, pottery, grooved hammers, bone implements, or the usual problematical forms and stone ornaments.

Fragments of bone have been found embedded in a mass of paint. Prof. Moorehead, in his article, says "my own theory, after opening two hundred and seventy of these graves, is that the "Red Paint" culture developed locally, that it is ancient, and that its origin will be difficult to trace." In his late work "Ten years of Archæological Research in the State of Maine," just off the press, the professor says: "Various theories have been advanced as to the identity of the Red Paint People. The most obvious question is, naturally, whether they were the same people as the Indians who inhabited New England at the time Europeans first came here, and whose descendants still survive, namely—the Algonquins."

Prof. Moorehead further states in the same work: "The conclusions to be drawn from all these comparisons seems clearly to be that the Red Paint People did not merge with any other known culture to the east, the west, the north, or the south; that they are absolutely distinct and very ancient. Whether, as has been suggested, we might find a change or a merging into another culture in Nova Scotia, cannot be fully determined until explorations are carried into that quarter.

"If there is a similarity to be noted with the culture of any tribe known to history, it would perhaps be with the Eskimo. Some implements in use among this people suggest Red Paint influence. Hence if the writer were to theorize at all upon the question of what became of the Red Paint People, he would offer the suggestion that they moved northward and later became the Eskimo.

"As to the antiquity of these people stated in years, no one is able to set even approximate dates. In comparison with aboriginal interments in more than twenty other states where the author has explored, they appear very old. They have begun to fit into their geologic surroundings and do not appear modern in any sense of the word. No other graves have just such an appearance."

By Very Rev. W. R. Harris, D.D., LL.D., Litt.D.

Preamble.

Before entering upon the study of the subject embodied in the title of this paper let us hurriedly and briefly consider the views advanced by authors and theorists to explain the origin of man in North, Central and South America.

Some writers, copying the "Responses Critiques" of Ballet, regard the American Indian as *autochthons*, or as human beings evolved from or separately created in America and independent of those existing at any time on other continents. Lord Kingsborough, in his preface to his voluminous and magnificent compilation "Antiquities of Mexico," was of the opinion that the aboriginal inhabitants of America were descendants from a remnant of a pre-diluvian race of men who came to America sometime before the great Noachic cataclysm. He contends that the American Indians constitute to-day the oldest race of human beings upon the earth. Plausible arguments and ingenious sophistries have been advanced to support the claims of priority of settlement of the Chinese, Welsh and Japanese. The French anthropologist, Campones, favoured an early Carthagenian colony, while Kercher and Huet contended that the Indians of America are of Egyptian origin. Sir William Jones pleads for an Asiatic origin, and some British and American antiquaries hold that the Indians are the sons and daughters of the lost tribes of Israel.

Humboldt in his "Essai Politique" was of the opinion that the Mexican Indians were the descendants of the Hiongnoos who, according to Chinese history, left China under their leader Puno in the dynasty of Ghingis-Lu (A. C. 2000), entered Siberia and were never again heard of.

Malte-Brun after a minute investigation concludes that tribes connected with the Finnish, Ostiack, Permian, and Caucasian families, passing along the borders of the frozen ocean, and crossing over Behring's Straits spread themselves in different directions towards Greenland and Chili; and that other tribes allied to the Japanese and Chinese, proceeding along the coast, penetrated to Mexico.

Again we are confronted with innumerable volumes tracing the origin of the Indians to Canaanites, Phœnicians, Mongols, Malays and Scythians. Many who have written on the subject are of the opinion that America received its first inhabitants from islands which lie between the extremities of Asia and America, that is to say from, Yezo, Gama's Land and other lands, including a cluster of isles, possibly the Aleutian Islands. All these suppositions are now relegated to oblivion and their ghosts will not presumedly walk again.

Theory of a Submerged Continent.

The theory of a submerged continent which, in past ages, was inhabited by a civilized people—a land which stretched across the Atlantic from Europe and Africa to America—is now admitted by many scientists to be the only satisfactory

solution of the problem involving the origin of the American Indian. Scott Elliott in his book—"The Story of Atlantis" accepts the theory of a lost continent and with Ignatius Donnelly in his "Lost Atlantis" and Henry Scharf in his "Origin of Life in America," supports his contention with very plausible, if not convincing arguments.

The study of ethnology and the search for Geologic truth is surely a noble occupation. But when that study is conducted upon severe principles, and with the aid of deep research, it will be found to combine the intellectual enjoyment of the mathematician, with the rapture of the poet and ever to open new sources of interest and delight.

While endeavouring to trace our Canadian Indians back to their cradle lands you will permit me to invite your attention to a description of these lands and their inhabitants before the daring Genoese sailed on his wondrous voyage of discovery.

The Ancient City of Palenque, Chiapas.

I well remember the evening hours I passed alone amid the ruins of the pre-Columbian city of Palenque, near the boundary of Yucatan. Everywhere around me were the gruesome memorials of a civilization and a religion which may have escaped the Noachic deluge, but had perished and passed away, as all civilizations and gentile religions, by a mysterious law of disintegration, vanish and disappear.

The repose, the stillness, the utter loneliness and abandonment of the dead city oppressed me with their burden of isolation and sadness. The sombre buildings—the abode of the scorpion and the centipede—the mutilated and wondrous statuary groups, where the cunning of the sculptor gave to the inert stone all the warmth and vitality of life, the shattered altars and fallen pillars, the utter silence and loneliness shrouding tablets, walls and columns, brought back to my mind memories of the ruined cities of Thebes, of Karnac and Babylon. But the changeless dark green of the foliage, the hue of the moss, and the gloomy shadings of the buildings of Palenque, wrap in sadness this ancient city in a shroud that only a tropic land and a tropic climate may weave.

The epigraphic signs on the tablets of stone, the unfamiliar stone faces, the hieroglyphic sculpture on sepulchral walls, and, above all, the heavy odour of decomposing tropical vegetation, separate this phantom in the wilderness from the fallen cities of all other lands, and give to it a character of its own and an entity unlike anything seen in Europe or in Asia.

Everywhere around me were ruins out of which came the tamarind trees stirred by the breath of the desert breezes and caressed by desert air, and no one, absolutely no one but myself, at that hour and in this weird and lonely place to contemplate the wreck and ruin of avenging time. Around me and upon all sides were heaps of ruins, ghastly in their sadness and loneliness for even the stone faces had a solemn sadness like unto the faces of mourners bereaved of their beloved.

These gigantic stones, the cyclopean walls, the colossal pillars were painful reminders of a race conquered by the foe, by plague, or annihilated by the vengeance of God. The volcano of Masaya, in the sister state of Guatemala, that for long years has been cold, is less majestic in the stern solitude of its crater than is this dead Palenque.

Stone figure on altar panel,
PALENQUE. CHIAPAS.

The Christian philosopher devoted to the study of the past or the future, the man of faith, or of science who gazes upon these melancholy remains as he wanders among these wrecks and ruins of time, studies the weird figures and looks upon the stony faces of the unknown dead, feels through his veins, nerves and arteries an emotion of terror and awe always produced by the oppression of desert solitude, or by the colossal remains of a buried and forgotten past.

This abandoned city, with its terraces and temples, its pyramids and sculptured figures of men and women, tells more eloquently than written history of the great antiquity of the primitive civilization of the American Indian. For anything we know it may antedate all the civilizations of Egypt and Ethiopia.

In the remains of many of the pre-Columbian cities of Mexico, Chiapas and Central America we behold the most elaborate examples of sculpture and stucco ornamentation adorning the altars, panels and walls of the buildings—the work of a people skilled in architecture, drawing and painting, and beyond doubt, excelling in arts that have perished.* In many of the halls still standing are arabesques, fashioned in mosaic, fret-work and delicate tracery not unworthy of a place in modern decorative art. Some of the sculptured figures are of heroic dimensions. The curiously designed reliefs, the unfamiliar figures of the altars, and the panel work on the inner walls of Copan are not surpassed by the temple specimens of Egypt and Assyria on exhibition in Paris and London.

The pillars and stone tablets which carry hierograms are remarkably well executed. These pictographs or secret writings were executed in symbols or characters known only to the priests or learned men of the race.

We have not, unfortunately, been able to decipher them, so that the characters on the monuments of Copan, Palenque, Quirigua and Mayapan furnish us no data or information. The Maya system of symbolic writing appears to be a species of mnemonics or signs to aid the memory. The hierographs on the Palenque tablets—now in the National Museum, Mexico City—are in perpendicular rows, and, for aught we know, the characters may be alphabetic and stand for a written language. On these tablets we behold a wonderful system of symbolism, and to interpret it, the Aztec or Mexican picture-writing affords us no help.

Apart from the accurate and familiar descriptions of many of the temples and great buildings left us by early Spanish writers, and of the art and splendour of Mexican structures, we have the testimony of Bernal Diaz de Castillo, the brave and rugged companion of the Spanish conqueror in his brilliant campaigns ending in the conquest of Mexico.

In Bernal Diaz' "History of the Conquest of Mexico" we find many surprising descriptions of wonderful buildings standing in the cities entered on the way from Vera Cruz to Mexico City. Of the city of Cempoal he writes; "we were surprised at the beauty of the buildings some of which had been lately plastered in which art these people are very expert." He speaks of large structures and fortifications of lime and stone and he adds: "Appearances demonstrated that we had entered a new country, for the temples were very lofty and the terraced dwellings and houses of the Caciques were plastered and whitewashed." Of the city of Cholula he tells us that it much resembled Valladolid in Spain.

*"It can hardly be doubted that these people were acquainted with many scientific instruments, strange inventions, compared with our own." Kingsborough, III, p. 128.

"Architecture, sculpture, and painting, all the arts which embellish life, had flourished in this overgrown forest; orators, warriors, and statesmen, beauty, ambition and glory had here lived and passed away." Stephens-Yucatan, vol. I. p. 103.

It "had a hundred lofty white towers, which were the temples of their idols. The principal temple was higher than that of Mexico and each of these buildings was placed in a spacious court." Approaching the city of Mexico, he is moved to enthusiasm by the spectacle of its grandeur. "We could compare it," he says, "to nothing but the enchanted scenes we had read of in Amandis de Gaul, from the great towers and temples and other edifices of lime and stone which seemed to rise up out of the water.

"We were received by the great lords of that country, relations of Montezuma who conducted us to our quarters which were palaces magnificently built of stone, the timber of which was cedar, with spacious courts and apartments hung with canopies of the finest cotton. The whole was ornamented with works of art painted, and admirably plastered and whitened, and it was rendered more delightful by numbers of beautiful birds." While reading his "True History" as Diaz terms his book, we should remember that it was written at a time when there were those then living who knew the facts and could call attention to any exaggerations or errors made by the writer. His history was never impeached; its fidelity to truth was admitted by all contemporaneous and subsequent writers.

Having seen in Yucatan, Mexico, Guatemala and Honduras many of the remains of these prehistoric cities, we are satisfied that his descriptions are as true and his statements as reliable as those written in any of our accredited books of travel.*

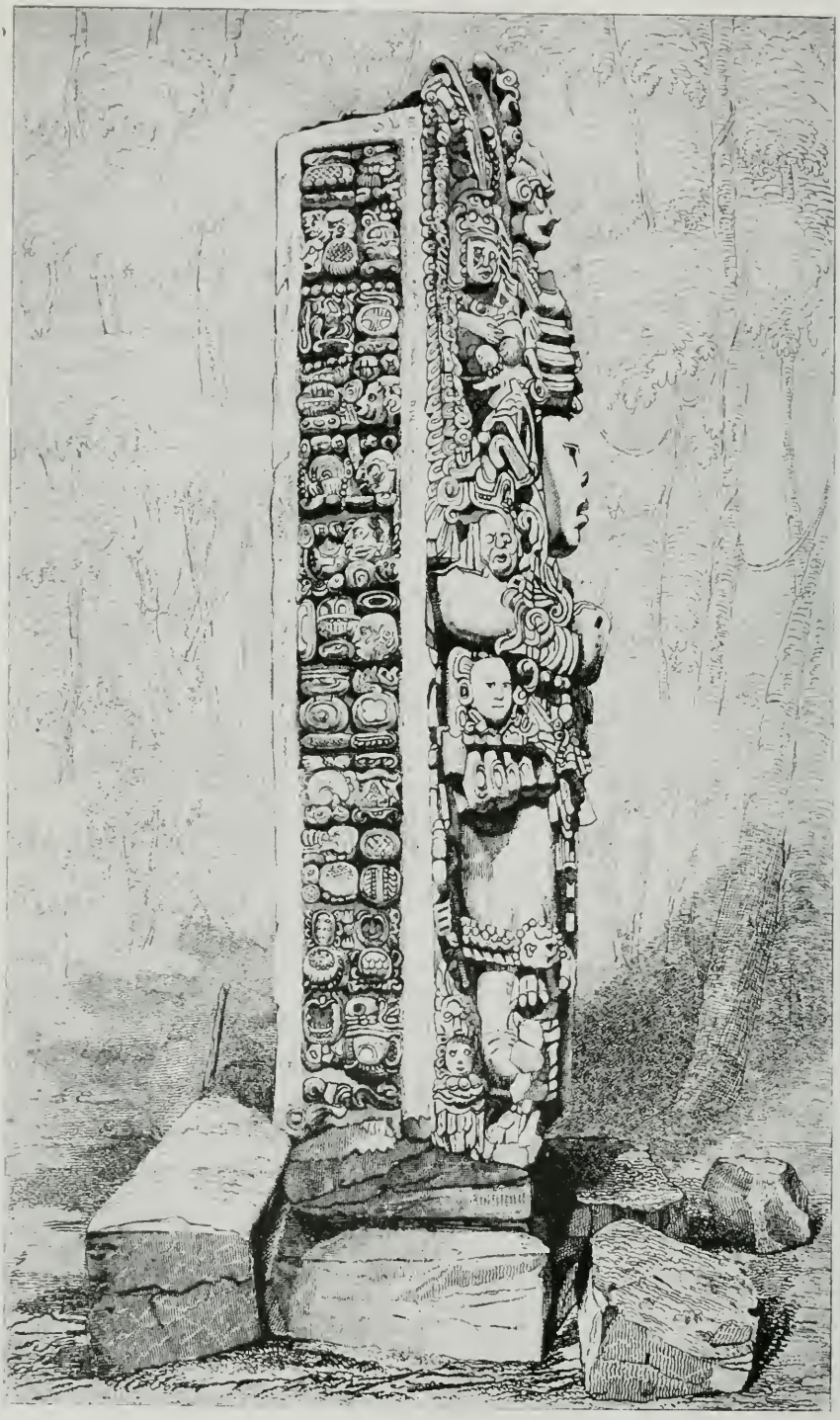
As if to confirm the statements of Bernal Diaz, Herrera, one of the most reliable and accurate of the early Spanish historians, writes of Yucatan: "The whole country is divided into eighteen districts, and in all of them were so many and such stately *stone buildings* that it was amazing. In many of these edifices were carved the Figures of naked men, with earrings after the Indian manner, stone idols, images, tigers, vases and jars.†

Here is what Professor Hiram Bingham writes of the ruins of Meechu-Pichu, which he visited in the year 1911: "The ruins of this ancient city are on an almost inaccessible ridge, two thousand feet above the Terabamba river. They are of great beauty and magnificence, and include *palaces, baths, temples* and about one hundred and fifty (stone) houses. The huge blocks of *white granite*, some of them twelve feet long, were so carefully cut that they match perfectly. The walls have withstood the elements for *at least two thousand years.*"

Taking our information from the writings of these early and later eye witnesses we are presented with vivid photographs of these decayed cities as they

*Bernal Diaz del Castillo was born in Spain in 1493, and in 1514 accompanied Cordova in his first expedition to Yucatan. When Grijalva, the following year, also sailed for Yucatan Diaz was with him. He finally enlisted under the banner of Cortez and took part in the skirmishes and battles of the conquistador. He accompanied Cortez on his terrible march to Honduras. In 1568 he was appointed regidor (prefect or mayor) of the city of Guatemala. His *Historia Verdadera de la Conquista de la Nevva Espana* was published, 1632, in Madrid, 63 years after his death.

†Antonio de Herrera, the great historian, was born, 1549, in Spain. He was a voluminous writer of history, but his most important work was the *Historia General de las Indias occidentales.* It covers the time from the landing of Columbus in 1492 down to 1554, thirty-four years after the conquest of Mexico. The history is in five folio volumes and records for a period of sixty years the facts associated with the conquest, colonizations and missionary labours of New Spain. It is the most erudite, accurate and complete record of these early times. Herrera collected a vast amount of information, taken from the most authentic sources, on the manners, institutions and customs of the Indians. The history, translated from the Spanish by John L. Stephens, may be consulted in any large library.



Colossal Statue and Hieroglyphics.
COPAN. HONDURAS.

were in other days, with buildings of lime and stone, moulded and carved figures of their gods, courts, strong walls, sculptured figures and elaborate ornamentation.

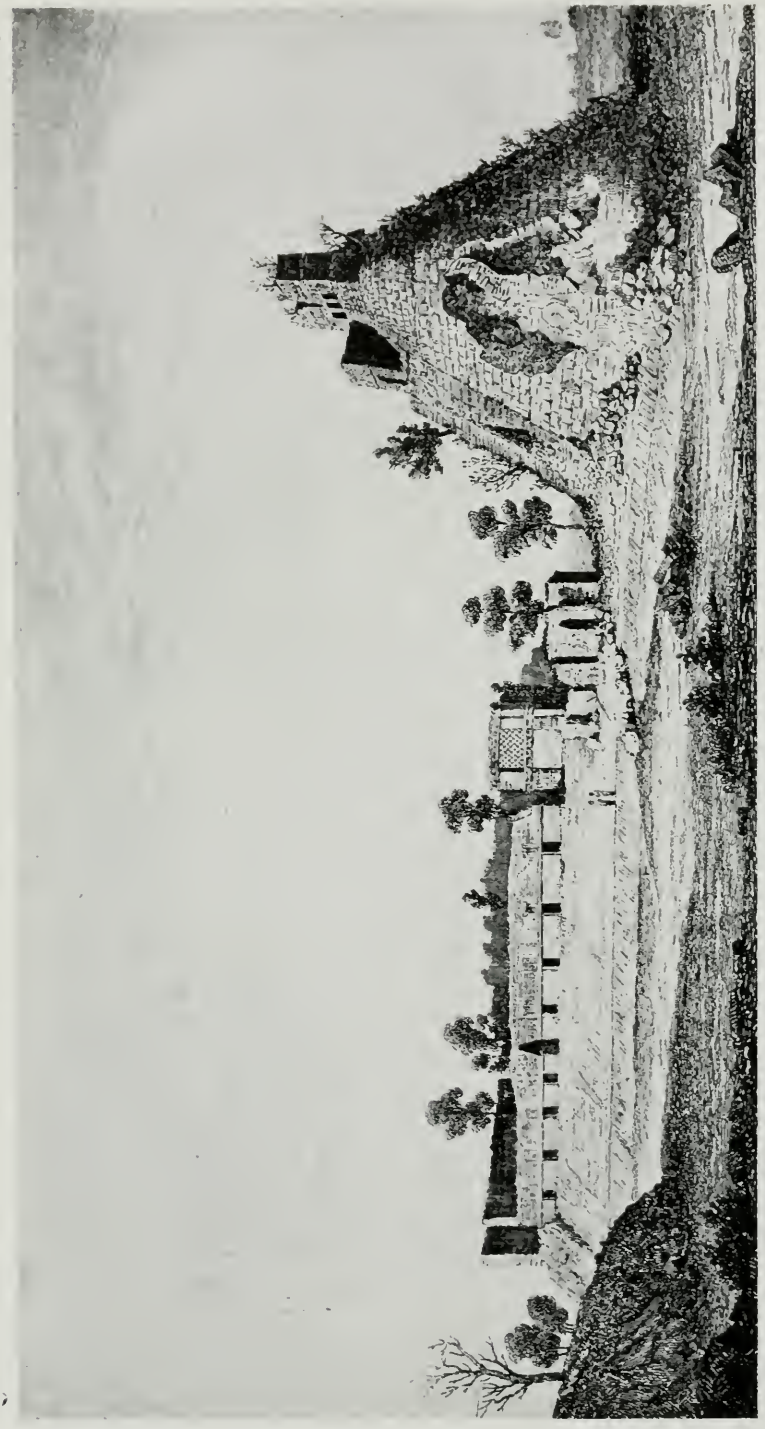
In the libraries of Dresden and Vienna are preserved the drawings of the figures, hieroglyphics and faces made from the monuments and tablets which escaped destruction. Many of these drawings, with early Mexican manuscripts, are reproduced in Humboldt's works and in the "Antiquities of Mexico," the magnificent compilation in nine large volumes by Lord Kingsborough.

The Phantom Cities

Mournfully beautiful are the ruins of the cities of Copan, Uxmal, Palenque and Quirigua, surrounded by forests painful in the duration and intensity of their silence. They are phantoms in a wilderness shrouded by a luxuriant tropic vegetation. When we demand of the Indians we meet lingering near the ruins, to tell us how many centuries have passed away since the quarry was opened to obtain stones for the buildings; how long was the city inhabited, and when, and why was it abandoned, there comes no answer to our questionings.

If, as it is conceaded by students of Central American history, the Quiches preceded the Mayas and another race antedated the Quiches and built the cities, temples and halls whose colossal remains are found all over Central America, Yucatan and Mexico, what assurances have we that many civilized communities did not successively appear, run their course, and perish in the veiled ages of prehistoric times? And by prehistoric times, I mean the ages between the creation of man and the beginning of authentic history. In order to account for the splendour and magnitude of the temples and public buildings of these cities, a centralized form of government must have existed. These wonderful structures could have been erected only by the expenditure of great labour—probably slave labour and under a highly organized system of superintendence. Possibly the government was an imperial autocracy, or it may have been like unto that of Greece, which was in religion and language one nation though, politically, a confederacy of sovereign states. The architecture and system of writing of these vanished people are different from those of any known race of men, ancient or modern. They are of a new order and are entirely and absolutely independent creations. They stand alone, without models or masters from abroad; their architecture originated among themselves. Their culture and refinement were not borrowed from Europe or Asia. They were a distinct, a separate people, existing apart from and independent of other continents, and apparently indigenous, like the animals, plants and fruits of the soil.

No analogies of art or culture assimilate the ancient civilization of America with that of any known people. Their structural designs and ornamental embellishments were their own and yet the remains of their great buildings at Uxmal in Yucatan, Quirigua, Guatemala, Copan in Honduras, the Mitla in Mexico are, to-day, as imposing and of as high an order of architecture as are those of ancient Egypt and Assyria. These primitive people built aqueducts, constructed causeways and laid many miles of paved roads. The immense ruins which the Spaniards discovered in Mexico and Central America and particularly in the riverine lands of Columbia and Uraqua, the highways cut, in many cases, through stubborn rock, or constructed of enormous blocks of stone, all these with the remarkable remains of ancient canals involving great feats of engineering,



Ruins of Prehistoric City of Uxmal, Yucatan.

prove conclusively the high plane of material civilization which these mysterious people reached. Considering the age in which these people lived, perhaps no better proof of their advanced civilization can be adduced than their methods of calculating time. The Mexican Calendar stones, now on exhibition in the National Museum, Mexico City, demonstrate the actuality of Aztec or Toltec civilization through their unique system of counting time.

Their civil year, consisting of 365 days was divided into eighteen months of twenty days and five intercallary, or supplementary days. For the ordaining of their religious or ceremonial days they had a system which, by means of a cycle of fifty-two years and a wonderful method of computation, correlated with one another the civil year and the astronomical year. And this was done by adding thirteen days at the end of the cycle.

Humboldt was of the opinion, that the names of the days of a month, divided into four weeks of five days, were borrowed from an early Zodiac formed of 27 or 28 lunar months, used from a remote antiquity in India, Thibet and Tartary.

There can be no doubt but that the calendar of these people indicates an accuracy of observation and an astronomical knowledge far superior to the scientific skill of the semi-barbarians living at the time of the Spanish conquest. Their civilization was then descending, or had already descended, to barbarism. That the ancestors of the Mayas, the Quiches and Aztecs were familar with the causes of eclipses we know from their astronomical maps which show the disk of the moon projected on that of the sun. The sun-dial was, so far as we know, the only astronomical instrument they used.

The Calendar Stone or Stone of the Sun.

The great *Calendar stone,* discovered buried in Cathedral square, Mexico city, proves, according to Professor Henriques Palacios, that these ancient people could mark the hours of the day with accuracy, that they were acquainted with the period of the solstice and of the Equinoxes and could foretell with precision the transit of the sun across the Zenith of Mexico. This wonderful Calendar stone, on the face of which is deeply cut, symbolic, astronomic and cryptic figures, is of dark porphyry and weighed, it is computed, fifty tons when hewed from the mountain. During the reign of the first of the Montezumas it was transported to Mexico City from beyond Lake Chalco, a distance of thirty miles over land intersected by canals. The central figure of the stone represents the sun and the year; the twenty figures placed in a circle around the sun stand for the twenty days of the Aztec month; the date 13th, *acatle,* above the head of the sun on the border of the stone, corresponds with our date 1479, A.D.*

Writing of this stone, Prescott says:

"When we reflect on this difficulty of hewing such a tremendous mass from its hard basaltic bed without the aid of iron tools, and of transporting it such a distance across land and water without the help of animals, we must feel admiration for the ingenuity and enterprise of the people who accomplished it."

Writing of the advanced agriculture of these ancient Americans, Professor O. F. Cook, who was a member of the expedition sent to Peru in 1915 by Yale University, says: "At a time when our ancestors in northern Europe were still

*Dr. Palacios, Professor Valentini, and Señor Chavero have given a larger interpretation to the cryptic figures, but their readings require confirmation.

Wonderful sculptured figure. Prehistoric city of Copan, HONDURAS.

utter savages, settled agricultural communities must have existed in the Peruvian region. The native agriculture of this land," he adds in his article which appeared in the National Geographic Magazine, May 1916, "reached an advanced stage of reclamation projects long before America was discovered by Europeans. Our undertakings sink into insignificance in the face of what this vanished race accomplished." "With tools made of an alloy of tin and copper," writes Prescott in his "History of the Conquest of Mexico," "they cut not only metals, but with the aid of a silicious dust, the hardest substances, such as basalt, porphyry, amethysts, and emeralds. They cast also vessels of gold and silver, carving them in a very delicate manner. They imitated very nicely the figures of animals and, what was extraordinary, could mix the metals in such a manner that the feathers of a bird, or the scales of a fish should be alternately of gold and silver. The Spanish goldsmiths admitted their superiority over themselves in these ingenious works."

In Mexico and Peru copper and tin were alloyed and hardened to the consistency of iron, gold and silver and bronze were skilfully beaten out and worked into filigree; there were excellent images of singing birds in gold and in silver, and a profusion of gold plate.

The Department of American Antiquities in the National Museum, Mexico City, is among the most notable in the world, and is a veritable treasure house of pre-Columbian relics and pre-historic "finds." In one room of this department are exhibited specimens of the famous Aztec picture writings, and Aztec maps and drawing of Tenochitlan, now the City of Mexico. Here also are arms, jewels, glazed pottery, and cloth made from the fibres of the henequen and maguey plants. Beautiful examples of feather cloth woven from extremely delicate floss of cotton, combined with feathers and rabbit's fur, polished crystals, obsidian or volcanic glass manufactured into delicate objects of ornamental or economic value are on exhibition, while figures of gold and silver, exquisitely wrought and filigree ornaments of beautiful design fill many cases in the Museum.

When examining these strange and wonderful exhibits you cannot help regretting that from the wreck of this primitive civilization some of the arts belonging to it were not saved and handed down to us. We do not know for a certainty how their astronomers determined the apparent motion of the sun, nor measured the length of the solar year. We cannot understand how they cut and polished crystals and other stones; manufactured delicate and complicated articles from volcanic glass; cast figures of gold and silver in one piece; made filigree ornaments without soldering; applied to pottery smooth and transparent glazes, such as we find in our own fine ware, and with colors that, after remaining for centuries buried among ruins, are yet fresh and brilliant. Nor do we know how they were able to weave rabbits' fur and beautifully delicate feathers with the finest tissues of cotton into valuable cloth.

Here it may be pertinent to enquire into the origin of this extraordinary civilization of these ancient Americans. Anthropologists, such as d'Orbigny, Heinrich Schliemann and Brasseur de Bourbourg are of the opinion that the regions now known as Yucatan, Chiapas and Tabasco were the cradle-lands of primitive American civilization. From this land, in very early days, went out colonies which established themselves in Honduras, Peru and Guatemala, carrying with them the culture and arts of civilized men.

From here also detached bodies moved northward and settled in parts of the territory known to-day as Mexico, where they built Mitla, Xochicalco, and other cities whose ruins excite our astonishment and admiration.

Everywhere in these lands we find the tidal remains of an ancient race which welled up from its primal bed in Yucatan, multiplied and rolled on over the entire continent. Everywhere also are the melancholy memorials of a people who, after accomplishing great things, ran their course and perished in the veiled ages of prehistoric times. In Copan, Chichin-Itza and Palenque are the remains of a cultivated, polished and enterprising people who, like the inhabitants of Tyre and Sidon, had passed through all the stages and gradations belonging to the rise and fall of Babylonian and Persian Empires.

They reached the highest material civilization and perished as perished the people of Heliopolis and Memphis. In the romance of the world's history there is nothing more pathetic than the ruins of Palenque. Discovered by accident, its original name is as entirely forgotten as are the names of those who built the city. It is but another witness to the world's mutations and to the eternal truth that:

"Nations melt
From Power's high pinnacle, when they have felt
The sunshine for a time, and downward go."

It was desolate and in ruins when, in 1520, Cortez, on his conquering march to Honduras, passed within a day's march of the city and makes no mention of it in his reports.

Decline and Fall of Pre-Columbian Civilization.

It is impossible to deny the civilization and vast antiquity of these prehistoric people without invoking the aid of arguments, negations and criticisms which would destroy the credibility of all history. When you move among the remains of these forest shrouded and phantom cities and gaze upon the ruined temples, altars and monuments, you know that they are but the pitiful fragments left after the wreck of a civilization that was lost long ago in the awful storms of civil war, of pestilence, or in the gradual debasement of individual and national life.

Standing among the wreck and ruin of the temples, statuary and altars of this vanished race, whose language no man may speak, whose faces are unlike those of any people known to us, it is impossible not to credit them with a certain grandeur of thought, high architectural skill, indomitable energy, and a debasement of moral and religious life supremely sad and pitiful. We do not know how, like Milton's angels, these civilized people fell from their high estate, never to rise again. Possibly, their civilization, like that of many ancient races, was destroyed by their own pride and arrogance, their own vices and corruption for:

"This is the moral of all human tales:
'Tis but the sad rehearsal of the past.
First, freedom, then glory; when that fails,
Wealth, vice, corruption, barbarism at last.
And history with all her volumes vast,
Hath but one page."

Without doubt feuds and fratricidal wars wore them down and possibly plagues and famines. Flying before their victorious conquerors defeated remnants fled northward into the forest and in time lost the best part of their civilization. They lost their social strength, their historic memories, arts, traditions, crafts and, in many instances, the very means and methods of cultivating the soil.

Who may deny that the savage or barbarian tribes who roamed the plains or peopled the forests of North America, in the memory of men yet living, were not the descendants of these hunted families; these remnants from a civilization that in remote ages was lost in lurid storms of war, or disappeared under adverse conditions which then, as now, make for the decay of national unity, national virtue and character. Observing in particular the social and the family state and the condition of the Canadian Indians from our own observation of their habits and our limited knowledge of their history, we note that the same fortunes have followed their migrations that followed those of all dispersed and scattered races.

When human beings become destitute and desperate conditions of existence confront them, barbarism and savagery will, in time, overtake them. When driven by the fortunes of war, or under the dire pressure of famine, from its own land, the flying remnant gradually separates from the civilization it carries from its home, it loses its culture just as we would lose it now, with all our refinement, if we were forced to live the nomadic or the hunter's life with its trials and hardships. And in the forests and desert wilderness to which the fugitives fled for safety, we can well imagine desperate conditions of existence and, therefore, impossible conditions of civilization.

Cradle Lands of our Canadian Indians.

From this civilized race, inhabiting in remote times Yucatan and Central America, came by way of Cuba and Florida, our North American Indians and also our Algonquins and Hurons. When Jacques Cartier ascended the St. Lawrence to Montreal, in 1535, the Indians he then encountered were in the neolithic stage, for their pipes, spear heads and arrow tips were deftly formed and polished. Their pottery was remarkably well fashioned and decorated with patterns and figures like unto those on the pottery now cased in the museum of Guatemala City. The Canadian Hurons and Algonquins of Champlain's time retained in their limited vocabulary many tropic words such, for example, as *Calumet, siciconet* (chi-chi-koue or rattle), *sagamite; petun* (tobacco) and many other words.*

Advancing northward they brought with them their feast and war dances, worship of the sun and the serpent, veneration for fire, belief in the immortality of the soul and in good and evil spirits, exogamy or denial of marriages among blood relatives, the law of maternal descent, methods of curing disease, painting the faces of their dead and burying with the corpse, pipes, weapons, provisions and various articles to be used in the spirit world. All these and many rites and ceremonies, with sorcerers, shamans and prophets, they inherited from their southern forbears of immemorial times. They brought with them in their emigrations the seeds of tobacco, squash, beans and maize or Indian corn. They retained the knowledge of moulding pottery, of fleshing and curing hides and

*The word *petun*, the Bureau of American Ethnology informs us, is used by Central and South American tribes for tobacco which is itself of Haiti origin.

utilizing shell beads for wampum, which arts were practised among the Maya and Quicha tribes as late as the time of Oviedo. Many of the ceremonial, social and religious practices of our Indians are almost identically the same as those of the Mayas and Aztecs who lived when Cortez landed, 1519, at Vera Cruz. Moreover the colour of our Indians indicates a southern origin. It takes thousands of years to give a new colour to a race and thousands of years under changed climatic conditions, to alter that colour. To any one familiar with the early history of the tribes of Louisiana, especially with that of the Natches, who retained the worship of perpetual fire and the practice of human sacrifice, the similarity of their religious rites, customs and habits, with those of the Mayas and Quiches of Yucatan will be at once perceived.

The discovery of tumuli, mounds and fortifications, extending in ranges through the valleys of the Ohio and the Mississippi, and through New York state into Ontario; the ruins of cities discovered ninety years ago in Arkansas and Wisconsin, suggest a migration and dispersion of the aboriginal tribes that in remote times crossed dry shod over the land bridge which united Yucatan, Cuba and Florida. That such a causeway existed in early times is now admitted by hydrographers and students of physical geography, including the late M. Fontaine and Maury, the eminent hydrographer and physicist.

Note—Independently of my own observations, I have, in this article, drawn freely from the writings of Senor Enrique Juan Palacios, Mr A. F. Bandelier, the late Señor Manuel Orozcoy Berra, John L. Stephens and Señor Antonio Garcia Cubas. The illustrations are copied from the drawings of M. F. Catherwood.

METHOD IN ARCHÆOLOGY

By Arthur C. Parker, M.Sc.
(State Archæologist of New York.)

Archæology is one of those newer branches of human science, and because it is new and somewhat organized, and altogether human, there have been many men, (and not a few women), who have believed themselves to be archæologists. Now, a serpent would not be unwise enough to believe itself an ophiologist simply because it had been condemned to crawl on its belly and to hiss out its hate: no mocking bird in the ecstasy of song would conjure itself an ornithologist; no rock would ever proclaim itself a geologist simply because it happened to be a monument of the eons and an upthrust of an igneous age. Yet, because man is man, somehow some men believe that there is no other requirement necessary to be an archæologist.

I once asked a poor, but happy, half-wit what he was doing in a cornfield. He answered, "You see, mister, I'm an archæologist, and I'm pickin' up arrowheads."

"Well, why do you pick them up?" I asked, to draw the fellow out.

"Well, you see, mister," he answered, "I can't help it: they are so bright and shiny. I, I—, can't help it, really: they are so bright and shiny."

Now, it would be going too far to say that all archæologists pick up arrowheads for this identical reason, and yet there are many, like this half-wit, calling themselves archæologists, who can give answers scarcely better. Hypnotized by a word that sounds scientific they endeavor to absorb its attributes by playing with its by-products.

A young man whom I had once employed as a field helper for a period of four weeks came to me some time later with the request that I advise him in the matter of a professional card. "Will it be all right," he asked, "if I print after my name the title 'Expert Archæologist?' for you said, yourself, that I was one of the best men you ever had to help you dig."

When I told the lad that after some twenty years of experience, with several years of institutional training back of that, I would not dream of calling myself *an expert,* and therefore advised him not to try it, he felt grossly injured. "Well, then," I said, "let us grant for a moment that you are an expert archæologist. Answer me the following questions: What is the heliolithic culture? What is the code of Hammurabi? What has the Tel Aney to do with Anu? Who excavated Nakum?"

And thus it happened that my young friend did not have his "professional" cards printed. This case is not an isolated one, for count the number of men who call themselves archæologists just because they have picked up an arrowhead or two. There are even collectors with 10,000 fine objects in their cabinets who, though ranked as archæologists in the public mind, know so little of archæology that they cannot define the term. Yet you will hear these men say, "I have collected Indian relics all over Canada and the States. Forty years of my life have been spent in gathering this collection. Here it is: 5,000 arrow points,

100 pipes, 50 gorgets, and all the rest of it—the finest collection in the country! And you tell me I am no archæologist! Why, I have dug up more than 200 Indian graves."

Let us take this gentleman as a typical amateur archæologist and accept his statements as the truth. Having had as much experience as he claims, no doubt he can answer certain questions that interest students of American pre-history. Let us ask the following: "What are the chief problems of American archæology? What are the associated artifacts of each culture represented within the area of your explorations? What is the difference between the pottery of the gorget using people and that of the people who made clay pipes with concentric rings about the bowls? With relation to the position of the skeleton, where was each artifact from a grave found? You found this birdstone in a grave: near what portion of the body did it rest? Where are your field notes? What proportion of the skeletons found were platycnemic? Platymeric? Had the perforated olecranon cavity? Had shovel shaped teeth? Were dolochocephalic? Brachycephalic? Where are your anatomical index cards? Where are your photographs of skeletons in situ? What good are your relics?"

I once asked a physician-collector questions similar to these, and received the angry reply that if I didn't believe the relics *genuine*, I need not buy them! Needless to say, I did believe the relics genuine, but I did not buy a single one for the museum that I represented. The man had explored a region characterized by at least four different cultures—one of the most interesting regions in the State of New York, yet he had thrown all arrow heads in one box, all pipes in another, all polished slates in another, and so on. Not a specimen had a number, a data blank, or a single written record. The doctor's principal concern was that each *relic* was genuine, that he had found it, and that in the more or less distant past some aborigine had made it. Further than that his mind did not conceive. For fifty years he had dug, hunted the surface or traded relics. In these fifty years he had ruined one of the key regions of the Empire State, so far as archæology is concerned. He had one satisfaction—that no one else would ever get as many from this area as he, and that he had proven as well that this country was once full of Indians.

In no other natural science is there this calm assurance. Where will you find a company of men calling themselves geologists, who simply hunt stones from here and there and everywhere, throwing all green rocks in one box, all laminated stones in another, all long stones in another, all round stones in another, and so on? In paleontology, where will you find devotees putting all fossils in one bin and then sorting them out by external appearances, regardless of location or strata? This, you would say, was the very antithesis of science and led to nowhere. An expert would go further and say that it was a waste of time and the destruction of a nascent science instead of the creation of it.

Let us suppose that the great archives at Ottawa were destroyed by a mighty tornado, and that its priceless records of Canada's history were torn into millions of shreds and scattered like confetti over the province. Suppose, then that some dullard, wandering over the land in after days, began to pick up all the letter "A"s that he could find, pasting them in an album. His collecting propensities then would cause another enthusiast to collect all the letter "B"s. Together they would go, with others who would be attracted by such a hunt, and pick up scattered letters from here and there, tearing them from already torn pages and pasting them in their albums. Their great joy would be in finding letters that they could identify, and in tearing them from the rest of the pages that they

found unintelligible. Finally, these men would gather into a club and proclaim themselves Archivists, and to prove their right to the title would exhibit their albums of letters. "Ah, what a finely illuminated letter A that is," you would hear one exclaim. "It is different from this one I found, for mine has a duller point and is crossed higher up." Then would come the enthusiasts who would point out that the A men were not scientists at all, for a chosen group had discovered at least twenty-six different types of letters, each of which had two characters. This would be a great discovery indeed, but what would it have to do with the history of Canada?

This sounds like an impossible occurrence, and yet, what do we find among men calling themselves "archæologists?"

Travel where you will, you will find men who *collect* arrowheads, and nothing but arrowheads. There are wonderful collections of *just arrowheads*. There are men who are almost insane on arrowheads: they pick them up wherever they go and little else will they see. Some of these men pride themselves on having developed "the arrowhead eye," by which they can discover arrowheads if even so much as an edge or a barb projects from the ground. You will find these arrowheads nailed to boards or pasted on cards in fanciful shapes—in tepees, large arrow outlines, stars, swastikas, Indian heads and the like. Some of these collectors have ambitions to cover the walls of their dens with these blocks, like crazy quilt patterns. Their book plates are arrowhead designs and they wear arrowheads on their watchchains. Frequently their very whiskers are combed to represent their sacred flints.

And then there comes along a student who says, "Hold, my friend; there are twenty-six, and more, other kinds of things to collect. Listen to me—I find pipes, gorgets, birdstones, amulets, hammerstones, runtees, awls, beads, celts, gouges, groved axes, disks, pottery, and scores of other things. I have a great collection of these things—they 'are wonderful.'"

Then, to disconcert the man with the arrowheads and his fellow with the twenty-six different kinds of things, a museum director comes along and inquires "Well, what has all this to do with the history of mankind?"

II

Archæology is nothing more or less than *pre-history*. It is the history of the race unconsciously written into the brown skin of Mother Earth and obscured by the layers of dirt that have been accumulated. Here and there is an intentional record, as in the monuments of the Mayas, or in the megaliths of Peru, but for the most part the record unconsciously written into the soil by the aborigines reveals itself in plainer language and is easiest of interpretation.

To those who by habit of thought have learned to lean upon dogmatic assertions, upon the written word alone, it may not at first appear how anything can be learned of man's history before history was written. Yet, as we have stated in another paragraph above, early man left upon the surface of the soil and scratched into it traces of his activities. These "traces" are as truly records as the written word would be, and in many cases far more accurate and satisfactory.

The refuse pit in many a hunter's camp survives to tell the story of the man who dug it. From such pits, through the artifacts and other evidences that have endured the elements, we have learned of the things he made, what weapons he had, and how he fashioned them, what he knew of tools and methods of manufacture, what food he ate, what he hunted and what he cultivated. We

may even know something of his idea of art and decoration, and we may even make good guesses at his religious beliefs. Every such pit, every such site, is a record of a man or a group of men: it is a sketch of their life story; it is a leaf from the book of pre-history.

It will be seen, therefore, that archæology has ends in view far more important than the mere collecting of relics and specimens, and that its aim is far more definite than that of only describing the "relics" found on pit or mound. These "relics" are to the archæologist specimens of human handiwork, and illustrative of some stage of culture. They are valuable, primarily, for what may be learned from them.

III.

It thus appears that the archæological specimen is not a thing apart, but only a unit in a larger complex. The terra cotta pipe from a village site on the Grand River is not an object to be held alone. It is only a letter or perhaps a word in the story of that site. What period of time, what occupation, what culture does it represent? These are things that we want to know. But that is not all. We must go further and ask what the associated artifacts are. In a museum of twentieth century costume, one would never think of cutting the buttons off coats and skirts and exhibiting the buttons in cases by themselves; this would be ridiculous, especially if the rest of the garment were cut apart and sorted out by parts. What the visitor would like to see first of all, is the garment in its entirety. Just so, the clay pipe from the Grand River, or any other site, must be placed together with all the other artifacts found in its immediate vicinity. For, how may we translate the record if the pages are cut apart and all the words "pipe" pasted together in an album, just for the sake of order? Would a student of Cicero do this in translating classic orations? If not, why should the archæological aspirant do so?

But that this is done by most collectors and by most museums is a startling fact, and points out most clearly that something is wrong—very wrong. What is it?

The wrong is simply this: the bulk of archæological specimens are found by persons utterly unfamiliar with archæology as a science. Vast quantities of specimens accumulate in the collector's cabinet, that come to him by anything but scientific ways. These things are passed on to museums, to emphasize the fact that specimens of aboriginal artifacts are numerous and attractive, and likewise to call attention to the fact that *the story of aboriginal man, which might be rescued, interpreted and preserved, is being actually destroyed in the most thoughtless manner.*

In most museums, unless they are supported by ample means and have a definite policy, it is not possible to exhibit specimens in their logical relation to the associated artifacts characteristic of the site. Progress in archæological knowledge, therefore, has been rather slow, from the very force of circumstances. Think of the science of surgery waiting for accidental results to bring to it the facts it requires. They come in this manner, to be sure, but the real surgeon takes his knife and explores with definite purpose.

If archæology is to be lifted from the category of an amateur pursuit, in which the collector of curiosities reigns as supreme monarch, it must emulate the surgeon—go after its data with definite purpose, seeking what it may find and then keeping it *together!* To allow the untrained collector to pick here and there, means destruction and confusion only.

IV.

How shall we lift archæology from the low standards to which it has been condemned? How may we prove that it is a science capable of shedding important light on the world's problems?

There are two methods among others that commend themselves to attention. First, *museums must seek to acquire their specimens only by deliberate excavation.* The field archæologist must be a trained man, capable of conducting his work, assiduous in his note taking, careful with his records, and doing his work as much with his camera as he does with his trowel. Trained men are to be found in all universities with courses in anthropolgy. No longer must a museum content itself with a here-and-there specimen bought or accepted as a gift.

Once a site is excavated and its history written, this history of the site may be illustrated by the specimens found. The museum will prepare its bulletin exhibits in the form of labels, and then use the specimen as illustrative material. The junk-shop museum must go as a relic of the dark ages of archæology, and it cannot go too soon. But it cannot go so long as legislatures and parliaments fail to provide the means by which a collecting hobby may become a sober science.

When such exhibits do finally merge into methodological arrays of culture history, we shall have one of the most attractive types of museum display. Schoolmen, students, savants and ordinary citizens will visit them, not to be confused, horrified or amused, but to see unfolded before their very eyes the material evidences of the evolution and progress of mankind. There they will read a story presented in a most fascinating way, and in it they will discover things of vital appeal.

The second remedy is to *forbid untrained private collectors to do any excavating whatever.* This sounds startling and impracticable, but a number of states in the United States now actually have laws making it a misdemeanor punishable by fine or otherwise to touch, injure, excavate or otherwise disturb archæological sites and monuments. Permission may only be obtained from reputable institutions, as a State Museum, or Archæological Association, and is granted only to applicants know to be trained students or who can prove themselves so. The reason for this is at once apparent. No man has a moral right to destroy the record that ancient man has for generations written so patiently into the soil. No man should have a *legal right* to do it, for this record, once destroyed, can never be restored; once disturbed, it is gone forever.

V.

The problems of North American archæology are numerous and some of them complex, but in general may be outlined in a manner that readily may be understood. Let us mention some of them.

I. How came man to North America? What routes did he take? What various divisions of the human race—if there were various divisions—peopled America? What was the direction of their migration? What is the age of each stock we now recognize, and where did it crystallize as a distinct group? When did certain stocks pass out of this region, and where did they go? What relation do the North American stocks bear to the peoples of other continents?

II. What are the characteristic artifacts of each culture? How do these artifacts differ from those of other cultures? What are the prototypes of each artifact? What artifacts became obsolete in a given group, and what were in-

vented or more recently employed? What in the material culture of one group does a neighboring group lack? What does this lack signify?

III. What was the physical type of each group? What is known of their skulls and other bones? Were any groups characterized by any definite morphological feature? Which were platycnemic? What was known of cranial deformation by artificial means? What was the stature and apparent weight of each group?

IV. What did each group know of, (a) agriculture; (b) hut building; (c) earth-works, as mounds, etc.; (d) quarrying; (e) stone working? What evidences of knowledge of government, law, measurements, religion, industry, etc., does each group exhibit?

V. What are the various cultures represented within the area of our investigation? What have we done to map this area? Where are the key sites of each culture? What has been done to trace these sites chronologically? What cultural significance has each site?

Such are some of the questions that arise in every general region, and these questions to a large extent outline our problem. Archæology, however, is only a portion of the much more extensive science of anthropolgy. In order to interpret archæological facts, in our province, at least, we must bring to our assistance the science of ethnology. Fortunately, in Ontario and New York, and the contiguous region, we are able to avail ourselves of ethnological data, and have a distinct advantage over other regions, as Ohio, in the interpretation of archæological data. We know that the Huron-Iroquois linguistic stock occupied a portion of this region when the colonists from Europe took possession. We know that various branches of the great Algonkian family lived here. We even have written history as an aid, and thus both archæology and ethnology are raised from the realm of pure deduction. With such help, we are able to work our way backward from the known to the unknown, and to draw our conclusions with some degree of certainty. This is a great advantage, for it strengthens our position in this work of investigation.

With these questions before us as guides to research, and with certain facts definitely known, we are able to begin our task of re-creating the story of yesterday's peoples. *This visualization of pre-history is exactly what we are seeking to attain.* Our goal is to see and understand the past. We want to know what and who these people were, where they came from, where they went, what they did, *what they thought* and how they met their environment.

Intelligent man wants a continuous history of himself, without breaks or missing chapters. He wants this that he may understand his own evolution and its lessons. This is why biologists seek to trace out the cradle land of the race and to hunt for the bones of the earliest anthropoids.

Our local archæology sheds light on certain chapters in the story of man in North America. It is our task to make these chapters intelligible and clear. It is our duty to discourage the untrained collector, who wants to tear up the documents that we rely upon for data, merely because he wants to collect a few isolated letters—arrowheads and pipes. Better still, it is our duty to see that this untrained man gets a new perspective, acquires knowledge of the right sort, and then becomes aware of the enormity of his crime. We must show him that no one has a right to be a collector unless he is first an archæologist in fact. We should then provide him with the guidance and literature that will be help-

ful in attaining these ends. Outside of direct university training through courses in anthropology, this can best be done by museum publications and scientific exhibits.

Our plea is for method and the application of scientific principles. Archæology cannot advance as a science until the public realizes that collecting "Indian relics" is not archæology, any more than collecting knives and pickled livers is surgery.

Until we catch a vision of the purpose of archæology and realize that it is a science, indeed, and not a mere hobby, we can have no conception of what archæology means. And when we do realize what it means we are astonished at its scope and its significance, for then, not only is history ours, but *prehistory*.

VI.

Archæology is the logical method by which we of to-day may gain some certain knowledge relating to the conditions, circumstances, environment, culture, capacity, thoughts and products of the groups of mankind that lived in the periods of time that have failed to bestow upon us letter-written records. Archæology is an exposition of prehistoric man.

Man has always been a problem to himself, and ancient man, no less than his modern descendant, has asked those wiser minds about him whence he came. Mankind's remote origin, ancestry, struggles to attain type and to survive, are things veiled and obscure. It is in the race-mind to question everything. We want to know why we do certain things in the manner in which they are done: we want to know why we have certain instincts, certain proclivities, certain habits, why we love to travel and feel its irrepressible urge to wander and to explore: we want to know our ancestry and the abode of our fathers, we want to know why we make things in certain ways and why we believe as we do.

It is of importance to understand all these things. What man was in the dim, distant past, when the race was young, has an important bearing on what man is now. Before the race can wisely plan its journey forward it must know something definite about the start of that journey. There is a goal ahead *somewhere*, and the question is whether or not we are on the right road to it, and if not, why not? We are anxious to know whether we have made the right start, and if so, why so many evils beset us. The intelligence of the race realizes that *what man was* has a tremendous bearing on *what man may become*. And to determine what man once was we are compelled to draw from the body of facts that constitute archæology.

BURIAL CEREMONIES OF THE HURONS

Our savages are not savages as regards the duties which nature herself requires us to render to the dead. They do not yield in this respect to several nations much more civilized. You would say that all their labor and efforts were for scarcely anything, but to amass means of honoring the dead. They have nothing too valuable for this purpose; they devote to this use the robes, the hatchets, and the shell beads in such quantities, that you would think to see them, on these occasions, that they were considered of no great value, and yet they are all the riches of the country; you may often see them in midwinter almost entirely naked, while they have good and fine robes in their chests, which they are keeping in reserve for the dead; this is, indeed, their point of honor. It is on this occasion especially that they wish to appear magnificent. But I speak here only of their peculiar funerals.

These good people are not like many Christians, who cannot suffer death to be spoken of, and who, in a mortal sickness, hesitate to break the news to one for fear of hastening his death. Here, when the recovery of any one is despaired of, not only do they not hesitate to tell him that his end is near, but they even prepare in his presence all that is necessary for the burial; they often show him the shroud, the hose, the shoes, and the girdle which he is to wear; frequently they are enshrouded, after their custom, before they have expired, and they hold a feast of farewell to their friends, during which they sing, sometimes without showing any apprehension of death, which they regard very indifferently, considering it only as a change to a life very little different from this. As soon as the dying man has drawn his last breath, they arrange the body in the same position that is to be preserved in the tomb; they do not lay it out horizontally, as is our custom, but crouched, like a ball (en peloton), "quasi en la mesme posture que les enfants sont au ventre de la mere." Until this time they restrain their mourning. After having performed these duties, all in the cabin begin to utter sighs, groans, and lamentations; the children cry *Aistan*, if it is their father, and the mother *Aien, Aien,* "My son, my son." No one seeing them thus weeping and mourning would think that they were only ceremonial lamentations; they blend their voices all in one accord and in a lugubrious tone, until some one in authority calls for peace; at once they cease and the captain hastens to announce through all the cabins that such a one is dead. Upon the arrival of the friends they resume their mourning. Frequently some one of more importance will begin to speak and will console the mother and the children, now extolling the deceased, praising his patience, his kindness, his liberality, his magnificence, and, if he was a warrior, his great courage; now saying, "What do you wish? there is no longer any remedy; it was necessary for him to die; we are all subject to death;" and then, "He lingered a very long time," etc. It is true that on this occasion they do not lack for conversation; I am sometimes surprised to see them discourse a long time on this subject, and bring up, with much discretion, all considerations that may afford any consolation to the friends of the deceased.

[1] Fifth Annual Report of the Bureau of Ethnology, translated from the Jesuit Relations, 1636, by Miss Nora Thomas.

Notice is also given of this death to the friends who live in other villages, and as each family employs another who has the care of their dead, they come as soon as possible to give orders about everything and to fix the day of the funeral. They usually inter the dead on the third day; in the morning the captain gives an order that kettles should be boiled for the deceased throughout the village. No one spares his best efforts. They do this, in my opinion, for three reasons: First, to console each other, for they exchange dishes among themselves, and scarcely any one eats out of the kettle that he has prepared; secondly, on account of the arrival of those of other villages, who often come in large numbers, lastly and principally, to gratify the soul of the deceased, who, they think, takes pleasure in eating his share. All the kettles being emptied, or at least distributed, the captain informs all the village that the body is to be carried to the cemetery. All the people assemble in the cabin; the mourning is renewed, and those who have charge of the funeral prepare a litter upon which the body is placed, laid upon a mat and wrapped in a robe of beaver skin: they then raise it and carry it by the four corners. All the people follow in silence to the cemetery.

There is in the cemetery a tomb made of bark and raised on four stakes of from 8 to 10 feet in height. While the body is placed in this and the bark is trimmed, the captain makes known the presents that have been given by the friends. In this country, as well as in others, the most agreeable consolations for the loss of relations are always accompanied by presents, which consist of kettles, hatchets, beaver skins, and necklaces of shell beads. If the deceased was of some importance in the country, not only the friends and neighbors but even the captains of other villages will come in person to bring their presents. Now, all these presents do not follow the body into the tomb; a necklace of beads is sometimes placed on its neck and near it a comb, a gourd-full of oil, and two or three small loaves of bread; that is all. A large part of them goes to the relatives to dry their tears; the rest is given to those who have had charge of the funeral, to pay them for their trouble. They also keep in reserve some robes or hatchets to make presents (largesse) to the young man. The captain places in the hand of one of them a stick about a foot long, offering a prize to any one who will take it from him. They throw themselves headlong upon him and remain engaged in the contest sometimes for an hour. After this each one returns peaceably to his cabin.

I forgot to say that generally throughout the ceremony the mother or wife stands at the foot of the sepulcher, calling the deceased, singing, or rather lamenting, in mournful tones.

These ceremonies are not always all observed; those who die in war they place in the ground, and the relatives make presents to their patrons, if they have any, which is generally the case in this country, to encourage them to raise soldiers and avenge the death of the warrior. Those who are drowned are also buried, after the most fleshy parts of the body have been taken away in pieces, as I have explained more particularly in speaking of their superstitions. The presents are doubled on this occasion, and all the people of the country are often there, contributing from their store; all this, they say, is to appease the Heaven of the Lake.

There are even special ceremonies for small children deceased under one or two months; they are not placed as others, in sepulchers of bark raised on stakes,

but buried in the road, in order, they say "que quelque femme passant par la, ils entrent secretement en son ventre, et que derechef elle leur donne la vie et les enfants." I doubt that the good Nicodemus would have found much difficulty there, although he doubted only for old men, "quomodo potest homo nasci cum sit senex."

This beautiful ceremony took place this winter in the person of one of our little Christians, who had been named Joseph in baptism. I learned it on this occasion from the lips of the father of the child himself.

When the funeral is over the mourning does not cease; the wife continues it all the year for her husband, the husband for the wife, but the grand mourning itself lasts only ten days. During this time they remain lying on their mats wrapped in their robes, with their faces against the earth, without speaking or replying to anything, save *O'Say* to those who come to visit them. They do not warm themselves in winter or eat warm things; they do not go to the feasts nor go out, save at night, for what they need; they cut a lock of hair from the back of the head and declare that it is not without deep sorrow, especially when the husband performs this ceremony on the death of his wife, or the wife on the death of her husband. Such is the great mourning.

The lesser mourning lasts all the year. When they wish to visit any one, they do not salute them nor say *O'Say*, neither do they grease their hair. The women do this, however, when commanded to do so by their mothers, who have at their disposal their hair, and even their persons. It is also their privilege to send their daughters to the feasts, without which several will not go. What I think strange is that during the whole year neither the wife nor the husband marries again, else they would cause themselves to be talked about in the country.

The sepulchers are not perpetual, as their villages are only permanent for some years, as long as the wood lasts. The bodies remain in the cemeteries only until the feast of the dead, which usually takes place every twelve years. During this time they do not neglect to honor the dead often. From time to time kettles are boiled for their souls throughout the village, as on the day of the funeral, and their names are revived as often as possible. For this purpose presents are given to the captains to be given to him who will consent to take the name of the deceased; and if the latter was of consideration and had been esteemed in the country during his life, he who represents him, after giving a grand feast to all the people of the country, to introduce himself under this name, raises a body of free young men and goes to war to accomplish some brave feat, which will show to the nation that he has not only inherited the name but also the bravery and courage of the deceased.

The Solemn Feast of the Dead.

The feast of the dead is the most celebrated ceremony that takes place among the Hurons. They give it the name of festival for the reason, as I should say now, that when the bodies are taken from the cemeteries each captain makes a "feast to the souls" in his village. The most important and magnificent is that of the master of the feast, who is for this reason called, par excellence, the "Maistre du Festin."

This feast is full of ceremonies, but the chief one is evidently that of "boiling the kettle." This outdoes all the others, and the festival of the dead is spoken of, even in the most serious councils, only under the name Chaudiere (the kettle).

They appropriate to it all the terms of cookery, so that when they speak of hastening or retarding the feast they say "rake out" or "stir up the fire under the kettle:" and when any one says "the kettle is overturned," that means there will be no feast.

There is generally only one festival in each nation. All the bodies are placed in the same grave. I say generally, for this year when the fête des Morts took place the kettle-boiling was divided and five villages at this point where we are stationed made a separate band and placed their dead in a separate grave. He who had been captain of the preceding feast, and who is like the chief at this point, made the excuse that his kettle and his feast had been spoiled and that he was obliged to make another. But, in fact, this was only a pretext. The real reason of this separation is that the great heads of the village have complained for a long time that the others took everything to themselves, that they did not share as they wished the knowledge of the affairs of the country, and that they were not called to the most secret and important councils and to the division of the presents.

This separation has been followed by distrust on both sides. God grant that it cause no hindrance to the spreading of the sacred Gospel. But I must touch briefly upon the order and the events of the feast.

The twelve years or more having expired, the old people and great men of the nation assemble to decide upon the time when the feast shall be held, so as to satisfy all the people of the country and the outside nations who are to be invited.

When the decision is made, as all the bodies are to be transported to the village where the common grave is made, each family takes charge of its dead with a care and affection that cannot be described. If they have relatives buried in any part of the country whatever, they spare no trouble to go and bring them. They take them from the cemeteries, carry them on their own shoulders, and cover them with the finest robes they have in their possession. In each village a good day is chosen, and they repair to the cemetery, where those called *Aiheonde* who have had the care of the sepulcher, take the bodies from the tomb in the presence of the relatives, who renew their tears and repeat the mourning of the day of the funeral.

I was present at this ceremony, and willingly invited all our servants, for I do not think that there can be seen in this world a livelier image or more perfect representation of the condition of man.

It is true that in France our cemeteries speak forcibly, and that all these bones heaped upon one another without distinction, the poor with the rich or the small with the great, are so many voices continually reminding us of death, the vanity of worldly things, and the insignificance of this present life. But it seems to me that the custom of our savages on this occasion shows us still more sensibly our wretchedness, for after the graves are opened all the bodies are laid out on the ground and left thus uncovered for some time, giving the spectators an opportunity for once to see what will be their condition some day. Some of the bodies are entirely devoid of flesh and have only a dry skin on the bones; others appear as if they had been smoked and dried and show scarcely any sign of decay. Others still are covered with worms.

The friends, being satisfied with this sight, cover them with handsome robes of beaver-skin, entirely new. Finally, after a while, they strip off the flesh and

skin, which they throw into the fire, together with the robes and mats in which the bodies have been buried. The complete bodies of those newly buried are left in the same condition and the friends content themselves with simply covering them with new robes. They touched only one old man, of whom I have spoken heretofore, who died this autumn on the return from fishing. This large body had only begun to decay a month ago, at the time of the first heat of spring; the worms were swarming all over it, and the pus which came from it caused an odor almost intolerable; nevertheless they had the courage to take the body from the robe in which it was enveloped, cleansed it as much as possible, took it up carefully and placed it in a new mat and robe, and all this was accomplished without exposing any of this corruption. Is here not a good example to animate the hearts of Christians, who should have more noble ideas to deeds of charity and works of pity toward their brethren? After this who will look with horror upon the misery of a hospital? And who will not feel a peculiar pleasure in serving a sick man covered with wounds, in whose person he serves the Son of God?

As they were stripping the bodies they found in two of them a species of charm. The one that I saw with my own eyes was a turtle's egg with a leather strap (courroye); the other, which was examined by our fathers, was a small turtle the size of a nut. This leads to the belief that there were sorcerers in our village, on account of which some resolved to leave it as soon as possible. Indeed, two or three days after one of the richest men, fearing that some misfortune would befall him, transported his cabin two leagues from us to the village of Arontaen.

Now, when these bones are well cleaned, part of them are placed in sacks, part in blankets, and they carry them on their shoulders, covering these bundles with other beautiful hanging robes. Entire bodies are put on a sort of litter and carried with all the others, each one taking his bundle into his cabin, where every family makes a feast to its dead.

Returning from this festival with a captain, who has considerable intelligence and who will be some day of high standing in the affairs of the country, I asked him why they called the bones of the dead *Atisken*. He explained as clearly as he could, and I learned from what he said that many believe that we have two souls, both divisible and material and yet both rational; one leaves the body at death, but remains, however, in the cemetery until the feast of the dead, after which it either is changed into a turtle-dove, or according to the more general belief, it goes immediately to the village of souls.

The other soul is attached to the body; it marks the corpse, as it were, and remains in the grave after the feast, never to leave it, "si ce n'est que quelq'un l'enfante de rechef." He mentioned to me, as a proof of this metempsychosis, the perfect resemblance which some persons bear to others who are deceased. Here is a grand philosophy. This is why they call the bones of the dead *Atisken* "the souls."

A day or two before departing for the feast they carried all these bodies into one of the largest cabins of the village, where some of them were attached to the poles of the cabin, and others laid around it, and the captain entertained and made a grand feast in the name of the deceased captain, whose name he bore. I was present at this "feast of spirits," and observed four things in particular: First, that the offerings which were given for the feast by the friends, and which consisted of robes, necklaces of shell beads, and kettles, were hung on poles ex-

tending the whole length of the cabin from one side to the other. Second, the captain sang the song of the dead captain, according to the desire he had expressed before his death, that it should be sung on this occasion. Third, all the guests had the privilege of dividing among themselves all the good things they had brought, and even of carrying them home, contrary to the custom at ordinary feasts. Lastly, at the close of the feast, as a compliment to him who had entertained them, they imitated as they sang the cry of the spirits, and left the cabin crying *haéé haé*.

The master of the feast, and even *Anenkhiondic*, captain-general of all the country, sent to invite us several times with much solicitation. You would have thought that the feast could not be a success without us. I sent two of our fathers several days beforehand to see the preparations and to learn exactly the day of the feast. *Anenkhiondic* received them very kindly, and on their departure comducted them himself a quarter of a league from there to where the grave was dug, and showed them with much display of emotion all the arrangements, etc. of the feast.

This feast was to have taken place on the Saturday of Pentecost, but some affairs which came up unexpectedly, and the uncertainty of the weather caused it to be put off until Monday.

The seven or eight days before the feast were passed in collecting the bodies (les âmes) as well as assembling the strangers who were invited; meanwhile from morning till night gifts were distributed by the living to the young men in honor of the dead. On one side women were drawing the bow to see who should have the prize, which was sometimes a girdle of porcupine quills or a necklace of beads; on the other hand, in several parts of the village the young men were drawing clubs upon any who would try to capture them. The prize of this victory was a hatchet, some knives, or even a beaver robe. Every day the remains were arriving. There is some pleasure in seeing these funeral processions which number sometimes from two to three hundred persons. Each one carries the remains of his friends, that is the bones, packed upon his back after the manner that I have described, under a beautiful robe. Some arranged their packets in the shape of a man, decorated with strings of beads, with a fine crown of red hair. On leaving their village the whole company cried *haéé haé* and repeated this "cry of the spirits" all along the way. This cry, they say, comforts them greatly, otherwise their burdens, although souls, would weigh very heavily and cause a weakness of the side (costé) for the rest of their lives. They travel by short stages; the people of our village were three days in going four leagues and in reaching *Ossossané*, which we call Rochelle, where all the ceremonies were to be held. As soon as they arrive near any village they shout again the *haéé haé*. The whole village comes out to meet them; many presents are again distributed on this occasion. Each one repairs to some one of the cabins; all find a place to put their bundles; this is done without confusion. At the same time the captains hold a council to decide upon the time that the company shall spend in this village. All the bodies of the dead of eight or nine villages were taken to Rochelle on Saturday of Pentecost; but the fear of bad weather obliged them, as I have said to postpone the ceremony till Monday. We were lodged a quarter of a league from there, at the old village, in a cabin where there were at least a hundred skeletons hung up to the poles, some of which smelled stronger than musk.

FEAST OF THE DEAD—COMMUNAL BURIAL.

Monday at midday, word was sent that they were ready and that the ceremony would begin. The bundles of skeletons were at once taken down and the friends unfolded the wrappings to say their last farewells. Their tears flowed anew. I admired the tenderness of one woman towards the remains of her father and children. She is the daughter of a captain who died at a great age and who formerly occupied a high position in the country. She combed his hair, she touched the bones one after another with as much affection as if she would have given them life: she placed near him his *Atsatonesai*, that is, his packet of rods (bûchettes) of the council, which are all the books and papers of the country. As for her children, she put upon their arms bracelets of shells and glass beads and bathed their bones with her tears. She could hardly be separated from them, but they were in haste, and it was necessary to start at once. The one who carried the body of this old captain walked at the head, the men following and then the women. They marched in this order until they arrived at the grave.

The following is the arrangement of this place: there was a space about as large as the Place Royale at Paris. In the centre was a large grave about 10 feet (pieds) deep and 5 fathoms (brasses) in diameter, round it a scaffolding and a sort of stage nicely made, from 9 to 10 fathoms (brasses) in diameter and 9 or 10 feet high; above the stage there were several poles raised and well arranged and others laid across them on which to hang all the bundles of skeletons. The entire bodies as these were to be placed at the bottom of the grave, were laid under the scaffolding the day before, resting on bark, or mats raised on stones to the height of a man around the grave. The whole company arrived with the bodies about an hour after midday, and divided into parties according to the families and villages, and laid their bundles upon the ground, almost as the pots of earth were made at the village fairs; they also unfolded their robes and all the offerings they had brought and hung them upon the poles which extended for from 500 to 600 fathoms (toises); there were nearly twelve hundred gifts which remained thus on exhibition for two whole hours, to give strangers an opportunity to see the riches and magnificence of the country. I did not find the company as great as I had expected; there were not more than two thousand persons. About 3 o'clock each one fastened up his bundles and folded his robes. Meanwhile each captain, in order, gave a signal, and all immediately took up their bundles of bones, ran as if at the assault of a city, mounted upon this stage by means of ladders which were placed all around, and hung them (the bundles), to the poles; each village had its department. This done, all the ladders were taken away. Some of the captains remained upon the platform and spent the rest of the afternoon, until 7 o'clock, in announcing the lists of presents which were given in the name of the deceased to some particular persons. For instance, they would say, here is what such a one, deceased, gives to a certain relative.

About 5 or 6 o'clock they lined (pauerent) the bottom of the grave and bordered it with large new robes, the skins of ten beavers, in such a way that these extend more than a foot out of it. As they were preparing the robes which were to be used for this purpose, some of them descended into the grave, and came from it with their hands full of sand. I inquired what this ceremony meant, and learned that they believed that this sand will render them happy at their games (au ieu).

Of the twelve hundred offerings that had been exhibited on the platform, forty-eight robes were to line and trim the grave, and each complete body had,

besides the robe in which it was wrapped, another one, and some even two others, to cover it. This is all: so that I do not think that each body had one to itself, taking one with another, which is the least that it could have for its burial; for these robes of beaver skin are what the clothes and shrouds are in France. But what becomes then of the rest? We will see presently.

At 7 o'clock the bodies were lowered into the grave. We had great difficulty in approaching it. Nothing ever pictured better to me the confusion among the damned. You could see unloaded on all sides bodies half decayed, and everywhere was heard a terrible uproar of confused voices of persons who were speaking without hearing one another: ten or twelve men were in the grave and were arranging the bodies all around it, one after the other. They placed, exactly in the centre, three large kettles, which were of no use save for the spirits; one was pierced with holes, another had no handle, and the third was worth little more. I saw a few necklaces of shell beads there; it is true, many of them were put on the body. This was all that was done on this day.

The whole company passed the night on the spot, having lit a great many fires and boiled kettles. We retired to the old village with the intention of returning the next day at daylight when they were to cast the bones into the grave; but we barely arrived in time, notwithstanding all the diligence we employed, on account of an accident which happened. One of the skeletons, which was not well fastened, or perhaps was too heavy for the cord which held it, fell of itself into the grave, the noise it made awoke the whole troupe, who ran and immediately mounted, in a crowd, to the platform and emptied, without order, all the bundles into the grave, reserving, however, the robes in which they had been wrapped. We were just leaving the village at that time, but the noise was so great that it seemed almost as though we were there. Approaching we saw suddenly an image of the infernal regions. This great space was filled with fire and smoke and the air resounded on all sides with the mingled voices of the savages. This noise, nevertheless, ceased for a while, and was changed to singing, but in a tone so doleful and weird that it represented to us the terrible sadness and the depth of despair in which condemned souls are forever plunged.

Nearly all the bones had been cast in when we arrived, for it was done almost in a moment, each one being in haste for fear that there was not room for all these skeletons; nevertheless we saw enough of it to judge of the rest. There were five or six men in the grave, with poles, to arrange the bones. It was filled up within 2 feet of the top with bones, after which they turned over upon them the robes that bordered the grave all around, and covered the whole with mats and bark. The pit was then filled up with sand, rods, and stakes of wood which were thrown in promiscuously. Some of the women brought dishes of corn, and on the some day and the following days several cabins of the village furnished basketfuls of it, which were cast into the pit.

We have fifteen or twenty Christians buried with these infidels. We say a *De profundis* for their souls, with the firm hope that if the Divine goodness does not cease His blessings on His people this feast will be made no more, or will be only for Christians, and will be celebrated with rites as holy as these are foolish and useless. They also begin to be a burden upon the people for the excess and superfluous expenses that are caused by them.

All the morning was spent in distributing gifts (largesses), and most of the robes that had been wrapped around the bodies were cut in pieces and thrown

from the top of the platform into the midst of the crowd for whoever could seize them first. There was great sport when two or three contested the possession of one beaver skin. In order to settle it peaceably it was necessary to cut it into so many pieces, and thus they came out nearly empty-handed, for these tatters were hardly worth the picking up. I admired here the industry of one savage. He did not hurry himself to run after these flying pieces; but, as there is nothing so valuable this year in the country as tobacco (petun), he held some pieces of it in his hand, which he presented at once to those who were disputing over the skin, and thus acquired it for himself.

Before leaving the place we learned that, on the evening when presents had been given to the foreign nations, on the part of the master of the feast, we also had been named; and, in fact, as we were going, *Anenkhiondic* came and presented a new robe composed of ten beaver skins, in return for the necklace which I had given them in the midst of the council to show them the heavenly way. They were so much obliged for this present that they wished to show some acknowledgment of it in so good an assembly. I would not accept it, however, saying to him that, as we had made them this present only to persuade them to embrace our faith, they could not oblige us more than in listening to us willingly and believing in Him who rules over all. He asked what I desired that he should do with the robe. I replied that he could dispose of it in whatever way he deemed best, with which he remained perfectly satisfied. Of the rest of the twelve hundred presents forty-eight robes were used to adorn the grave. Each body wore its robe and some of them two or three. Twenty were given to the master of the feast to reward the nations who had assisted at it. A number were distributed on the part of the dead, through the captains, to their living friends. A part of them were only used for show, and were returned to those who had exhibited them. The old people (anciens), and great leaders of the country, who had the administration and management of it, privately took a great deal, and the rest were cut in pieces, as I have said, and scattered through the assembly. However, it was only the rich who lost nothing, or very little, at this feast. The mendicants and poor people brought and left there all they possessed of any value, and suffered much by striving to appear as well as others in this celebration. Every one stood upon this point of honor.

Indeed, it was only by chance that we were not also participants of the feast. During this winter the Captain Aenons, of whom I have spoken before, came to make us a proposal on the part of all the anciens of the country. At that time the boiling of the kettle (chaudiere) was not yet divided. They proposed to us then that we should consent to exhume the remains of the two Frenchmen who had died in this country to wit, Guillaume Chaudron and Estienne Bruslé, who was killed four years ago, and that their bones might be placed in the common grave of their dead. We replied at first that this could not be done; that it was forbidden; that as they had been baptized, and were, as we hoped, in heaven, we respected their bones too highly to allow them to be mixed with the bones of those who had not been baptized. Besides, it was not our custom to exhume the bodies of those who had been buried.

We decided, however, after all, that as they were interred in the wood and since the people desired it so much, we would consent to take up their bones on the condition that they allowed us to put them in a particular grave, with the bones of all that we had baptized in the country.

Four reasons especially persuaded us to give them this final answer. First, as it is the greatest expression of friendship and good-will that can be shown in this country, we yielded to them readily in this point that which they wished, and thus showed that we desired to love them as brothers and to live and die with them. Second, we hoped that God would be glorified in it, especially, in that separating by consent of all the nation the bodies of Christians from those of the unbelievers, it would not be difficult afterwards to obtain special permission that their Christians should be interred in a separate cemetery, which we would bless for that purpose. Third, we claimed to bury them with all the rites of the Church. Fourth, the old men, of their own accord, desired us to raise there a beautiful and magnificent cross, as they showed us afterwards more particularly. Thus the cross would have been established by the authority of the whole country and honored in the midst of this heathenism, and they would have been careful not to impute to it afterwards, as they have done in the past, all the misfortunes that befell them.

This captain thought our proposition very reasonable and the old men (anciens) of the country remained very well contented with it. Some time after, the chaudiere was divided, and, as I have said, five villages of our part of the country resolved to hold their feast apart.

In the spring a general assembly of all the principal men was held, to consult about the feast and to endeavor to prevent this schism and reunite the cooking of the kettle. These dissatisfied ones were there and I also was invited. They made me the same proposition as before. I replied that we were very well satisfied, provided that this was done under the conditions that we had demanded. I was reminded of the division, and they asked me, since there were two feasts (chaudieres), that is, two graves, on which side I desired to have our special grave. To this I answered, in order to offend no one, that I would leave it to their judgment; that they were just and wise and they could decide between themselves. The master of the feast of Rochelle said, thereupon, with condescension, that he did not claim anything and that he was willing that the other, who is the chief at this place, should have on his side the remains of our two Frenchmen. The latter replied that he laid no claim to the one that had been buried at Rochelle, but that as for the body of Estienne Bruslé it belonged to him, as it was he that had engaged with him and led him into this country. So here the bodies were separated, one on one side, the other on the other side. At this some one said privately that indeed he (the chief) had the right to demand the body of Estienne Bruslé, and that it was reasonable that he should render some honor to his bones, since they had killed him. This could not be said so discreetly but that the captain had a hint of it; he concealed his feelings, however, at the time. After the council, as we had already gone, he raised this reproach and began to talk with the captain of Rochelle, and finally gave over entirely the body of Bruslé, in order not to embitter and make bloody this sore, of which the people of this point have not yet cleared themselves. This caused us to resolve, that we might keep in favor with those of Rochelle, not to meddle with either the one or the other.

Truly there is reason to admire the secret judgments of God, for this infamous man certainly did not merit that honor; and to tell the truth we had hesitated much in resolving to make on this occasion a particular cemetery, and to transport to holy ground a body that had led so wicked a life in the country and

given the savages such a wrong impression of the manners of the French. At first some thought hard of it that we should have this opinion and were offended, alleging that this being so they could not boast as they hoped among strange nations of being related to the French, otherwise, it would be said to them that they did not have much appearance of it, since we had not wished to put the bones of our people with theirs. Afterwards, however, having heard all our reasons, they decided that we had acted prudently and that it was the best means of maintaining our friendship with each other.

Shall I finish for the present with this funeral? Yes: since it is a mark sufficiently clear of the hope of a future life which nature seems to furnish us in the minds of these people, as a good means of making them understand the promises of Jesus Christ. Is there not reason to hope that they will do this, and that as soon as possible? Certainly I dare to assert that with this prospect we have reason to fortify our courage and to say of our Hurons what St. Paul wrote to the Philippians: "Confidens hoc ipsum, quia qui coepit in vobis opus bonum, perficiet vsque in diem Christi Iesu." These poor people open their ears to what we tell them of the kingdom of heaven; they think it very reasonable, and do not dare to contradict it. They are learning the judgments of God in the other life; they are beginning to have recourse with us to His goodness in their necessities, and our Lord seems to favor them sometimes with some particular assistance. They procure baptism for those who they think are about to die: they give us their children to be instructed, even permitting them to come three hundred leagues for this purpose, notwithstanding the tender affection they have for them; they promise to follow them one day and show us that they would not give us such precious pledges if they did not desire to keep faith with us. You would say that they were waiting only to see some one among them to be the first to take this bold step and dare to go contrary to the customs of the country. They are, finally, a people who have a permanent home (demeure arrestée), are judicious, capable of reason, and well multiplied.

I made mention, the past year, of twelve nations entirely sedentary and harmonious, who understand the language of our Hurons: and the Hurons make in twenty villages, about 30,000 souls: if the rest is in proportion, there are more than 300,000 who speak only the Huron language. God gives us influence among them: they esteem us, and we are in such favor with them that we know not whom to listen to, so much does each one aspire to have us. In truth we would be very ungrateful for the goodness of God if we should lose courage in the midst of all this, and did not wait for Him to bring forth the fruit in his own time.

It is true that I have some little apprehension for the time when it will be necessary to speak to them in a new way of their manners and to teach them "à clouër leur chairs" and restrain themselves in the honesty of marriage, breaking off their excesses for fear of the judgment of God upon their vices. Then it will be a question of telling them openly, "Quoniam qui talia agunt regnum Dei non possidebunt." I fear that they will prove stubborn, when we speak to them of assuming Jesus Christ, wearing his colors, and distinguishing themselves in the quality of Christians from what they have been formerly by a virtue of which they scarcely know the name: when we cry unto them with the Apostle: "For this is the will of God, your sanctification: that you should abstain from fornication, that every one of you should know how to possess his vessel

in sanctification and honor; not in the passion of lust, like the gentiles that know not God." There is, I repeat, reason to fear that they may be frightened with the subject of purity and chastity, and that they will be disheartened with the doctrine of the Son of God, saying with those of Capernaum, on another subject, "Durus est hic sermo et quis potest eum audire?" Nevertheless, since with the grace of God we have already persuaded them, by the open profession we have made of this virtue, neither to do or say in our presence anything which may be averse to it—even to threaten strangers when they forget themselves before us, warning them that the French and especially the "black robes" detest these intimacies—is it not credible that if the Holy Spirit touches them once, it will so impress upon them henceforth, in every place and at all times, the reverence which they should give to His divine presence and immensity, that they will be glad to be chaste in order to be Christians, and will desire earnestly to be Christians in order to be chaste? I believe that it is for this very purpose that our Lord has inspired us to put them under the charge of St. Joseph. This great saint, who was formerly given for a husband to the glorious Virgin, to conceal from the world and the devil a virginity which God honored with His incarnation, has so much influence over the "Sainte Dame," in whose hands His Son has placed, as in deposit, all the graces which co-operate with this celestial virtue, that there is almost nothing to fear in the contrary vice, for those who are devoted to Him, as we desire our Hurons to be, as well as ourselves. It is for this purpose, and for the entire conversion of all these peoples, that we commend ourselves heartily to the prayers of all those who love or wish to love God and especially of all our fathers and brothers.

JEAN DE BREBEUF.

ART OF THE CANADIAN INDIANS

By William J. Thomsary

In writing about the art of savages I do not propose to discuss conundrums as to the origin of art and of the artistic faculty in man. Even if we were able to discover and demonstrate the origin of the artistic faculty among savages, even if we could trace it to some obscure germs in the habits of animals we should be no further ahead; for, suppose we were to admit, with the Darwinians, that the aesthetic sense exists in the lower animals so powerfully that the prettiest spotted birds and beasts and speckled trout obtain the noblest mates and so, artistically, improve the race, many philosophers would not listen to us. They would argue that, supposing the lovely colors of parrots, for example, to be the result of an aesthetic taste in parrots, men too, by certain reasoning, should be born into this world scored with the patterns and brilliant with the hues of blue china.

There is no doubt that for countless centuries almost all known races of men practised the art of tattooing themselves, and, if the prettiest parrot finds the prettiest mate and bequeaths its rich hues to its chickens, why did not the best tattooed man and woman hand on, by heredity, the colors and embossed patterns of their skin. But, it would clearly be a mere waste of time and space for us to study the origin of art from the point of view of the evolutionists. One might quote a celebrated Greek writer and state that all art is the expression of man's imitative faculty and delight in imitation. We must therefore shun the whole obscure question of the origin of art and adopt the simple reason "that man betakes himself to art because he likes it."

We shall adopt, provisionally, the belief that the earliest art with which we are acquainted is the art of savages of contemporary or extinct races. Some philosophers may tell us that all known savages are only degraded descendants of early civilized men, but we shall argue on the opposite theory, that the art of the American Indians, for example, is really earlier in kind, nearer the rude beginning of things, than the art of the people who have attained to some skill in modern art. One of the oddest problems of early art rises before us in connection with the question already stated—"Is Art the gratification of the imitative faculty?" Now, among the lowest and worst equipped savages, art is both decorative and imitative. The patterns on Indian shields, clubs, pipes, etc., the scars which they raise on their own flesh, are very rarely imitations of any objects in nature. The Red Indians, like many aboriginal races, distinguish their family by the names of various plants and animals from which each family boasts its descent. Thus, if a Red Indian (say an Iroquois) is of the family of the turtle, he blazons a turtle on his shield, tepee, or head-dress, probably tattooes or paints his breast with a figure of a turtle, and always has a turtle (reversed) on the pillar above his grave. Anyone who will look through a collection of Indian weapons and utensils (pottery, etc.) will be brought to the conclusion that the native art is not essentially imitative; as a rule the decorations take the simple

form or shape of the "herring bone" pattern, or such other patterns as can be produced without the aid of spirals, curves, or circles. There is a natural and necessary cause of this choice of decoration.

The Indian working with tools made of flint, bone, or sharp shell, cannot easily produce any curved lines. Everybody, who, when a boy, carved his name on a fence or on bark of a tree, remembers the difficulty he had with the letters S and G, while he got on easily with letters like M and A which consist of straight lines. The savage artist had the same difficulty with his rude weapons in producing curves or spirals. Assuredly the races of the earth have wandered far have been wonderfully intermixed, and have left the traces of their art here and there on sculptured stone; but when two pieces of artistic work, one civilized, one savage, resemble each other, it is always dangerous to suppose that the resemblance bears witness to relationship or contact between the races.

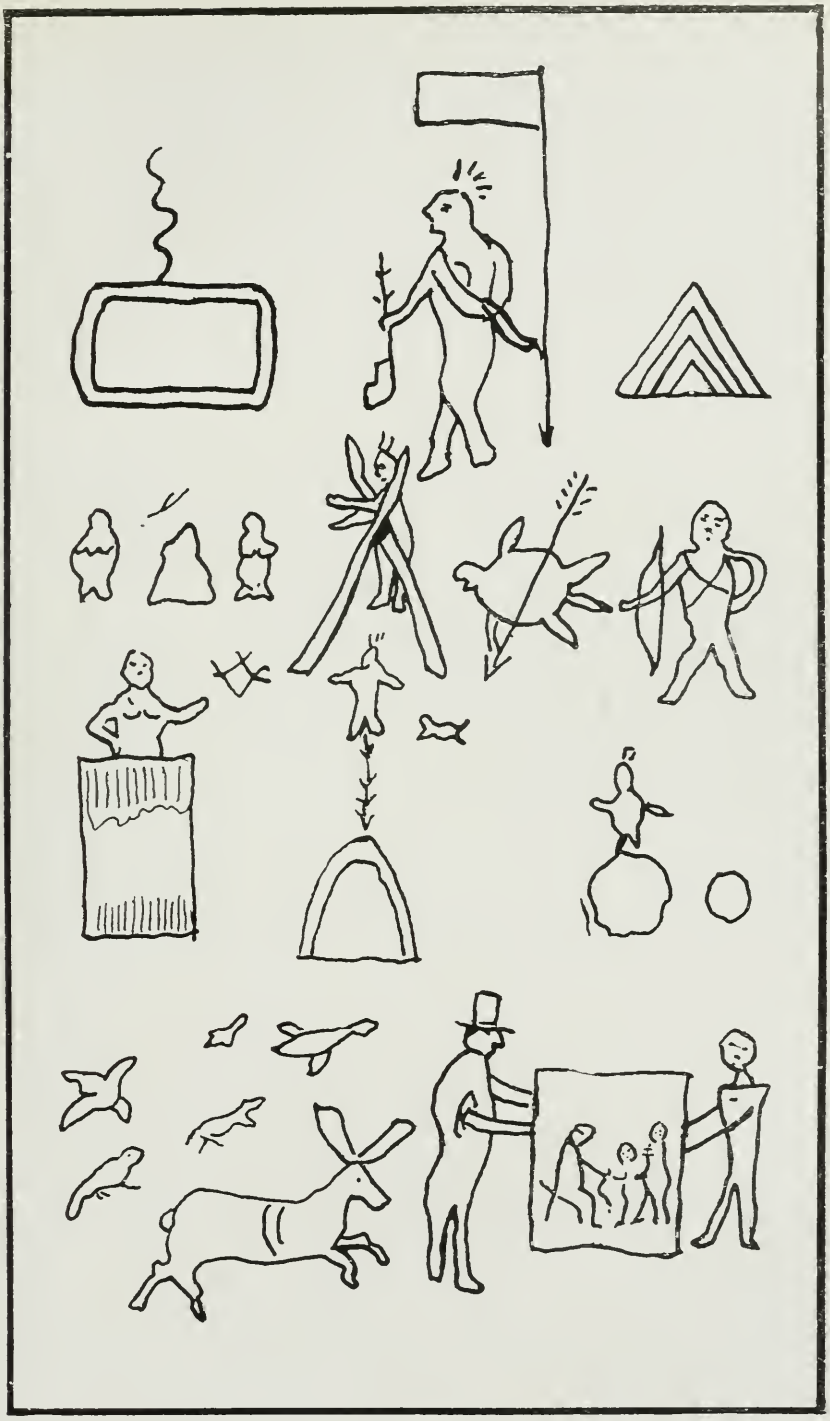
The "Swastika," as it is called, the cross with right angles to each limb, is found everywhere, in India, Scotland, Greece, Peru, America, as a natural bit of ornament. The allegorical fancy of the Indians gave it a mystic meaning and the learned have built worlds of religious theories on this "Pre-Christian Cross," which is really a piece of hasty decorative work with no original mystic meaning at all.

Often we are asked "Where did they get inspiration?" One has only to travel through the magnificent forests, rivers, and lakes of northern Ontario, and study the wonderful effects of sky and water, also the flora and animal life of that paradise of nature, to be inspired with admiration for the art of the uncivilized Indian. Nature absolutely was the aboriginal Indian's God and instructor, as it should be with the modern child before the mechanical and college-taught teacher gets his grip on him or her, and moulds each into a machine with no personality or individuality.

Note the strong personality in the drawings and carvings of the ancients, every movement of their pen, brush, or chisel, suggests their daily life and actions, or has some mythical or religious meaning. This inspiration was very forcibly demonstrated or illustrated to the writer of this article. When, in company with Dr. Orr, I was paddling over the waters of one of our northern lakes on a beautiful morning in October, not a breath of wind and the water like a sheet of glass, we saw a perfect piece of Indian design, or rather, the origin of his design. To describe it would be almost impossible, but it so impressed me that I made some sketches of it; a reproduction of which appears on the opposite page.

Reflections of driftwood, stone, etc., on the low shore of the lake formed the most beautiful tracery or design for suggesting the work on Indian clothing and implements.

We have now to discuss the efforts of the savages to represent these designs of nature; and here we have to consider the purpose which animates him and the materials which are at his service. His pictures have a practical purpose, and do not spring from what we are apt, perhaps too hastily, to consider the love of imitation for its own sake. In modern art, in modern times the desire to imitate nature by painting or sculpture has almost an inborn instinct, and it does not seem at all unlikely that we inherit the love of imitative art from very remote periods. Such were the rude beginnings of human language, and whether this theory be correct or not, there are certainly practical reasons which impel the savage to attempt imitative art.



The legend of Manabozho.

As an example of Red Indian picture writing, we print a drawing from Kohl's book on the natives of North America. This rude work of art, though the reader may think little of it, is really a document as important in its way as the Chaldean clay tablets inscribed with the record of the Deluge. The coarsely drawn figures recall to the artist's mind much of the myth of Manabozho, the Prometheus, the Cain and the Noah of the dwellers by the great lakes. Manabozho was a great chief who had two wives that quarrelled. The two stumpy figures represent the wives, the mound between them is the displeasure of Manabozho. Further on you see him caught up between two trees from which the wolves and squirrels refused to extricate him. The kind of pyramid, with a figure at the top, is a mountain on which, when the flood came, Manabozho placed his grandmother to be out of the water's way. The somewhat similar object is Manabozho himself on the top of his mountain. The animals you next behold were sent out by Manabozho to find out how the deluge was faring and

Reflections in water suggesting origin of Indian design.

to carry messages to his grandmother. This scroll was drawn on birch bark by a red man of literary and artistic attainments. The Indians have always been in the habit of using this for the purpose of retaining their legends, poems, and incantations.

The popular idea of art as applied to tobacco pipes may be said to have its base in monstrosities in meerschaum, and vulgarisms in cherry and briar. The popular idea is natural, perhaps, but wrong, for it happens that in all ages and amongst all peoples, pipes have been the subject of ornamentation more or less tasteful, and of design more or less beautiful, original, and rare. The pipes of the Canadian Indians are made of various substances: different coloured lime, sandstone, slate, shale, quartz, and various clays being manipulated with much skill, one representing a wolf clasping a bowl, another two quaint figures kneeling and a turtle in relief, and others again representing frogs and turtles.

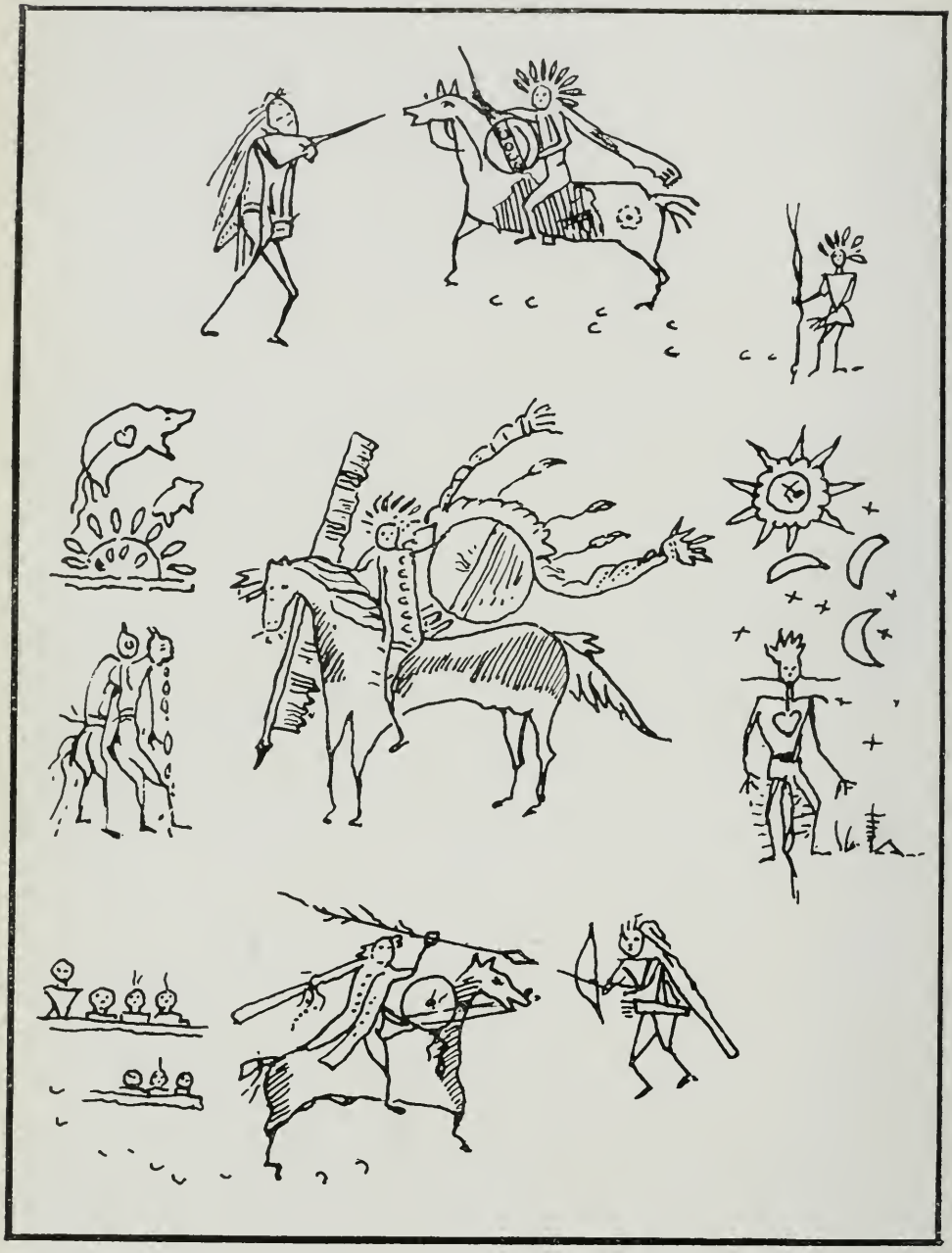
The ceremonial, or Pipe of Peace, was usually very highly decorated, the long stem being covered with a design beautifully worked in bird and porcupine

quills and feathers of various hues and colours; the design generally representing the tribe or chief by some emblematic figure. In respect to the arts of life, all those stationary tribes were in advance of the wandering hunters of the north. The women made a specimen of earthen pot for cooking. They wove rush mats with no little skill, and they spun twine from hemp by the primitive process of rolling it on their thighs. The masterpiece of Huron handiwork, however, was the birch canoe, about which a whole story could be written. Of pipes, than which nothing was more important in their eyes, the Hurons made a great variety, some of baked clay, others of various kinds of stone carved by the men, often with great skill and ingenuity, during their long periods of monotonous leisure. The collection of pipes in the Ontario Provincial Museum, is more complete than that of any other archæological museum in the world.

But their most mysterious fabric was wampum. This was at once their currency, their ornament, their pen, ink and parchment. No compact, no speech to the representative of another nation had any force, unless confirmed by the delivery of a string or belt of wampum. The belts, on occasions of importance, were wrought into significant devices suggestive of the substance of the compact or speech, and designed as aids to memory. The Hurons had, however, in common with other tribes, a system of rude pictures by which they could convey to each other information touching ordinary subjects of Indian interest. (Ont. Arch. Report, 1911).

The tribes of Mexico, as well as those of every part of the continent of America, delighted in the use of colour. It was very generally employed for embellishing the person and in applying decorative and symbolic designs to habitations, masks, shields, articles of skin, bark, and pottery, and in executing pictographs upon natural surfaces of many kinds such as cliffs and the walls of caverns. Colour was applied to the person for decorative purposes as an essential feature of the toilet for impressing beholders with admiration or fear. The native love of colour and skill in its use were manifested especially in decorative work. This is illustrated by the wonderful masks and totem poles of the northwest coast tribes. The pigments were derived from many sources, but were mainly of mineral origin, especially the oxides of iron and carbonate of copper. The aborigines were skilled in preparing the mineral colours, which were usually ground in small mortars or rubbed down on a small stone, and in extracting stains and dyes from vegetable substances. The colours were applied with a dry point or surface, as with a piece of chalk, charcoal, or clay, or, when mixed with water or oil, with the fingers or hand, stick, brush, or pad, and they were also sprayed on with the mouth.

Catlin tells the following story. On the opposite page is a (fac-simile) copy of the paintings on a Pawnee robe, the property and the design of a distinguished doctor or medicine man. In the centre he has represented himself in full dress on his favourite horse, and at the top and bottom, it would seem, he has endeavoured to set up his claims to the reputation of a warrior, with the heads of seven victims whom he professes to have slain in battle. On the sides there are numerous figures very curiously denoting his profession, where he is making his patients vomit and purging them with herbs. And here also he has represented his totem "the bear," and also the rising of the sun and the



Copy of Painting on a Pawnee Robe.
Illustration from Article Art of the Canadian Indian.

different phases of the moon, which these magicians looked to with great dependance for the operation of their charms and mysteries in effecting the cure of their patients.

Brushes were rude, consisting often of fibrous substances such as bits of wood, bark, or reeds chewed, beaten, or rubbed at one end until sufficiently pliable to deliver the colour. Hair was not in general use, although excellent brushes are now made by the more advanced tribes. The brushes used by the northwest coast Indians were often provided with beautifully carved handles.

Pictography may be described as that form of thought writing which seeks to convey ideas by means of pictures, signs, or marks more or less suggestive of the object or idea in mind. Although the earliest use of picture signs is shrouded in the mists of antiquity, although they have been employed by all uncivilized peoples, it is chiefly to the American Indian we must look for a comprehensive knowledge of their use and purpose. In the earlier stages of picture writing, when the savage artist sought to record facts and ideas, his picture signs assumed a literal form, and, so far as his limited skill sufficed, natural and artificial objects were portrayed realistically. Among the Indians of Canada and the United States the use of pictograph signs reached its highest development among the western tribes in their so-called calendar. These calendars are painted on deer, antelope, and buffalo hides.

The Dakota calendars have a picture for each year, or rather for each winter, while that of the Kiowa has a summer symbol with a picture or device representing some noteworthy event. In America there is a vast body of primitive and indigenous art, having no parallel in the world and, being uncontaminated by contact with the complex conditions of civilized art, it offers the best possible facilities for the study of the fundamental principles of development.

The laws of evolution correspond closely in all art, and, if once rightly interpreted, are traceable with comparative ease through all the succeeding stages of civilization. Embroidery was worked with quills of the porcupine or sometimes with those of bird feathers, and in both cases the stiffness of the quill limited freedom of design, making straight lines and angular figures a necessity.

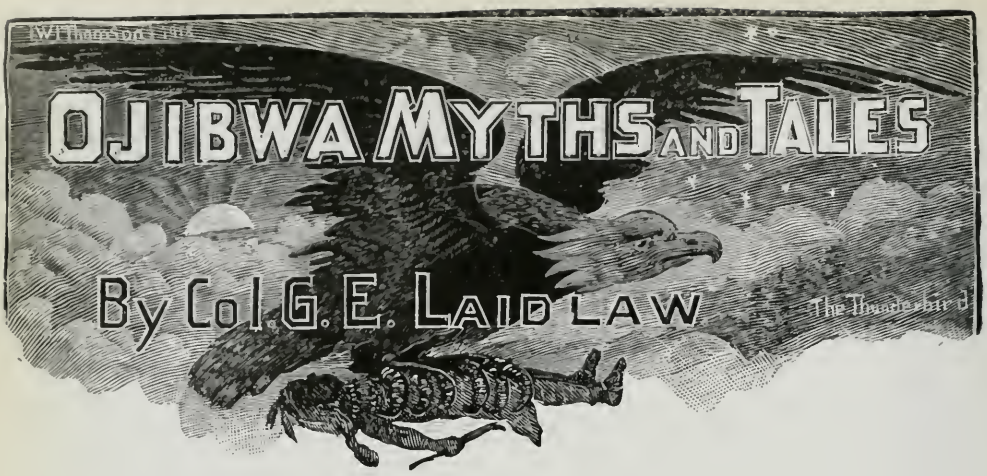
The dyes, which varied in different parts of the country, were compounded variously of roots, whole plants, buds, and bark of trees. The quills were usually steeped in concoctions of these until a uniform colour was obtained—red, yellow, green, blue, or black. It was not uncommon for a woman to have in her workbag several patterns drawn on bits of skin or bark, cut through to make a stencil. These patterns were drawn with bone, paint brush, or stick, on a skin or bark that was to be worked. A woman who was skilled in or had a natural gift for, drawing would copy a design by the free hand method, except that she would first make measurement in order that the pattern should be in its proper place and proportions. Some even composed designs and worked them out as they embroidered.

Nearly every tribe had its peculiar or special style of ornamentation. The dress of the men was more ornamented than that of the women, and the decorations the women put on the former were generally related to the man's employments—hunting and war. The figures were frequently designed by the men, who very often designated what particular figures they desired the women to work on their garments.

The decorative figures worked on the garments of children not unfrequently expressed prayers for safety, long life, and prosperity, and were usually symbolic. The art seems to have reached its highest development among those tribes in whose territory the porcupine was a native. It is doubtful whether any woman at the present day could duplicate the fine embroidery of a hundred years ago.

In concluding an article of this description it is interesting to look back and make comparison with the advanced artist of modern times, thoroughly trained and versed in all the traditions of the ancient and with a technique that is almost perfect. They form themselves into schools, thus introducing what we will call style, similar to the modes of fashion in clothing, changing with every generation, and thereby destroying all personality or individuality of design in the artist. In fact he becomes merely a machine following the dictate of some specialist in cube-ism, impression-ism, or some other "ism," so that his work is less intelligent and very uninteresting to the average public, and this they call the higher civilization. Then, for a relief and a few moments' real enjoyment, we hark back to the ancients for inspiration and originality of design.

TURTLE ROCK—ALGONQUIN PARK.



6th Paper.

This paper contains a selection of nature stories, with the exception of several, from a great variety of myths and tales that were collected in 1921 and the first part of 1922, mostly from the Rama Reserve, but some are from Garden Village (Indian), Sturgeon Falls, Ontario, and several from the Ojibwa Reserve at Dechain's Creek, North Bay, Lake Nipissing, Ontario, called Na-yah-bah-quang. And one story, evidently a modern addition, from Bear Island, Lake Temagami, collected by Susan Commanda, Ojibwa. The stories from North Bay were collected by Mrs. Exavier Commanda from her parents-in-law, Frank Commanda, Senior, Ojibwa name, Shobokesick=All Day or Through the Day, and Mrs. Isabel Commanda, Ojibwa name, Meshuk-onah-be-no-quah=Clear Morning Woman.

Turtle Rock is located on Catfish Lake, Algonquin Park, Ontario. Is estimated to weigh 30 tons, said to have been at one time an Indian god. It resembles a huge turtle like some prehistoric monster; see letter of G. W. Bartlett, Superintendent, Algonquin Park, 5th April, 1917. Indians were accustomed to, in former days, offer gifts of tobacco, food, etc., to the spirit or manitou, that they believed inhabited natural objects, such as large rocks, caverns, waterfalls, rapids, etc., to propitiate them for success in their journeyings and undertakings.

Some further variants of the name Nanbush and authorities as per following:

Mä'näbus, Mänäboso, Nänibozhn } Alanson Skinner, "Medicine Ceremony of the Menomini, etc," Vol. IV. Indian notes and monographs, museum of the American Indian, Heye Foundation, New York.

Nä'näpûsh, Mr. R. Harrington, P. 232, "A preliminary Sketch of Lenape Culture," American Authropologist, Vol. XV, No. 2, April-June, 1913.

Manobozho.—H. G. Tucker, P. 36, "A Warrior of the Odahwahs," Vol. XVIII, Papers and Records, Ontario Historical Society, 1920.

Naniboosh.—See No. 401, "Ojibwa Myths and Tales," Col. G. E. Laidlaw, used by Hugh King, Jr., Rama Ojibwa.

Some further variants of Manitou:

Manido, Manitu } Alanson Skinner, "Medicine Ceremoni of the Menomini, etc." Vol. IV.

Manit'to.—Mr. R. Harrington, a "Preliminary Sketch of Lenape Culture."

Mannitou.—Alanson Skinner. Vol. V, No. 4. Contributions, Museum of the American Indian. Heye Foundation, "Exploration of Aboriginal sites in New York City."

Mon-ne-do.—Rama Ojibwa, Kenneth G. Snake, No. 443, Ojibwa Myths and Tales, by Col. G. E. Laidlaw, occurs in the word "Ma-gee-mon-ne-do"—The Devil.

Variations of Wesse-Ke Jak. (The Canada Jay—Perisoreus Sp.) Known as Whiskey-Jack amongst local northern white people in Ontario and Manitoba. This is a personage somewhat similar to Nanbush, among various bands of northern Ojibwa, the name Whiskey Jack being a corruption of the Indian name.

Wiske-djak.—Page 1, Memoir 71, Geological Survey, Ottawa, Ont., 1915. "Myths and Folk Lore of the Timiskaming, Algonquin and Temagami, Ojibwa," F. G. Speck, who speaks of him as a trickster-performer, and the personified Canada Jay, or meat bird.

Wis a Ke Jäk
Wisû Ké Jäk
Wisagatcak
} Pages 341, 351, "Plains Cree Tales" Vol. XXIX, No. CXIII, July-Sept., 1916. Journal American Folk Lore, Alanson Skinner.

Ouishcat-chan.—Helen Merrill Edgerton. "The Song of the Ouishcat-chan." Mail and Empire, Toronto, issue of July 31, 1920.

Wise Ket cak.—Page 148, "Eastern Cree and Northern Saulteaux," Alanson Skinner, Vol. IX, Pt. 1, Anthropological papers, American Museum, Natural History, New York, N.Y.

Wee-sack-Ka-Chack.—P. 165, Chap. XIII, "People of the Plains" by Amelia M. Paget, 1909.

Another variant of Petit Jean, local Ojibwa Tinzhaw:

Tāshān.—No. 78, Page 757, William Jones Ojibwa Texts, Vol. XII, Pt. 2, 1919, American Ethnological Society.

Variant of Wintégo:

Ween-de-go—P. 57. "People of the Plains" by Amelia M. Paget.

No. 363.

THE PARTRIDGE.

Told by Mrs. Exavier Commanda.

There was once a young man who fasted, as was done in the olden times. The old squaw used to take dry bread and water to him, and he had to fast for nine days, but this old squaw thought she'd keep him there longer, till one morning, the old squaw went to the camp, but could not see any one but a bird, and she told it "that it would be called a partridge by the Indians in time to come" and the stripes (cross bars), on the partridge's tail were the number of days the young man fasted, and the wide stripe (i.e., the last cross-bar on the tail), was when he became a bird, and he was told that he would live on the trees, and that the Indians would eat his flesh.

Note by G. E. L.—The name of the Partridge. Partridge in Ojibwa is Pee-nah.

Note by G. E. L.—Nos. 363-366 were collected by Mrs. Exavier Commanda, from Northern Ojibwa, from reserve on Deschain's Creek, near North Bay, Ont., called Na-ya-bah-quang.

No. 368.

Story of the Robin.

(The Origin of the Robin.)

Told by Joe Yellowhead.

There was once upon a time, when an old Indian wanted his son to be learned something very powerful. The old Indian told his son he was going to make a nest a way up the pine tree, and so he did. He told his son to stay there, until he dreamed something very powerful, so he took his son way up the tree, and said to his son: "I will come over to see you and ask you if you dreamed strong things." Next morning he went to see his son, and asked him "What kind of dream he had? very strong things?" He said "Stay here, until you learn more!" This young man stays in the nest day and night, nothing to eat, for 10, 20, 30, 40 days. This young man he must be hungry! When the old man came to see his boy, he found a robin in the nest, singing, chee-up, chee-up. The old man didn't catch his son, the bird flew away. The end.

Notes by G. E. L.—Compare with No. 56, Page 388, Ojibwa Tales from North Shore Lake Superior, Wm. Jones, Vol. XXIX, American Journal, Folk Lore, No. CXIII, 1916.

In another Ojibwa version it is a girl fasting, that is turned to a robin.

No. 372.

The Chuck and the Fisher.

Told by Kenneth G. Snake.

Once upon a time, long time ago, there lived an old mother chuck, the ground-hog, and she had some young chucks. When the winter came, and when they had awoke from their winter sleep, she used to go out and have her meals, but she wouldn't let her little ones out, she pretended that she was cold when she went in. She would gather some rotten wood and she would throw it into her home, and told her little chucks that there was a snow storm, she didn't want her little chucks to go out, because some one might kill them. So one day, Mrs. Chuck told her little chucks to look for lice in her head, and she fell asleep, and her mouth was wide open. Now she told her chucks that it was winter yet, but when they saw her mouth wide open they looked in it, and they saw little green bits of something in between her teeth, and when they were sure that she was asleep they said that it wasn't winter, so they went out, and when they got out the meadows were green, and they went out a little piece from their hole, and further, and further until they were far from their home. The fisher saw them playing about enjoying themselves, she at once ran after them and killed them and ate them. After a while, Mrs. Chuck awoke and she was surprised to see nobody in so she went out to search (for) them. She found them lying about some half eaten, and she knew who did it. It was Mrs. Fisher, so she at once started to look for the little Fishers, and when she found them, she ate them, and when Mrs. Fisher came home she found Mrs. Chuck feasting on her (the fisher's) children, so she ran after her, and she (mother Chuck), sprang to a cedar tree and

tried to make herself look like a ball and the fisher scratched it, and that is why the cedar trees sometimes have a ball some place near to the ground.

Note by G. E. L.—

Ground hog—Kukochees.

Fisher—Wee-gee-geege.

Cedar trees sometimes have an enlargement near the roots, like a large knot growing on the trunk, locally called "burrs."

No. 374.

SHEGEBIS THE DIVER.

Told by Kenneth G. Snake.

Once upon a time there lived a diver who didn't do what the law was, he used to have two women. They (the others, or other people, or beings) used to invite him to come (to their place), but he wouldn't go, he knew they were going to get one of his women, he would run to the shore with his women and the others would chase him around with their boats, but the divers would dive. And when the others knew that they couldn't catch them, they asked the blood suckers to suck up the lake, and there were three blood suckers and they sucked up the lake until it was dry and Shegebis had nowhere to hide, so the three (divers) ran around and were nearly caught, but they managed to get away each time, but they (the divers) couldn't find the blood suckers, but as Shegebis was running, he saw the whole three (blood suckers) lying on the stones, and he had to peck the first one, and the second one, and the third so the water came out. He pecked them so hard that the blood suckers burst and Shegebis dived with his women, and the ones that were running after them (chasing them) had just time to run to safety, and so that is why the shegebis has always two other shegebis that always hang around with him.

Note by G. E. L.—See Cingibis (No. 5), Pages 51-53, Memoir 71 Geol. Survey, Ottawa, Myths and Folk Lore of the Timiskaming. Algonquin and Temagami Ojibwa, by F. G. Speck.

No. 376.

KAGH, THE PORCUPINE.

Told by Mrs. Exavier Commanda.

It is said a porcupine is the swiftest animal there is, though it is the slowest when a person sees it, but if it wants to go it can go some. A man can't catch it, and, it is believed he, (the porcupine) is a manito (God or spirit).

One day a man made fun of the Kagh, (porcupine) and said to it "a Kagh is professed to be a god, but an Indian can be one too, if he wants to," with that he caught the porcupine by the tail and threw it away for a year or two. This man was (became) very poor, lost nearly all he had, and could not earn anything. A man should never make fun of the animals because there is a God—manito that takes care of all the animals.

Note by G. E. L.—Nos. 376-377 were collected by Mrs. Exavier Commanda from North Bay, Ontario, Ojibwa. See Menomini Folk Lore. No. 39, Page 426.

No. 379.

THE LITTLE MILL THAT DID GREAT WORK TO THIS DAY.

Told by Kenneth G. Snake.

Once upon a time there lived a man, he was married and he was poor, but his father and his brothers were rich and they didn't care for him. It was near Christmas. He and his wife talked and thought how to get their Christmas dinner. There was an old woman living near and he went to her, and asked her if she knew something about getting rich. The old woman took him to a little room and there she showed him a little mill, and she showed him how to start it and how to stop it, and the old woman gave it to him. He took it home, and when he got home and his wife saw it she laughed at him, and said "What use is that (what) you brought here?" He started it without speaking to her and said "Fish" to the mill, they came out like straw from a blower (on a threshing machine), and a whole lot of other things too. His wife was surprised to see such fortune. When they were all ready for the dinner he went (and asked) his father and (his) brothers. They came and were surprised to see the table all set, just the way it should be. When they had eaten their fill one of his brothers asked him where he got the things (eatables) that they had, and he showed them the mill. The brother asked him if he wished to sell it, but he didn't want to sell it, but he said he would lend it, and his brother took it home. When the brother started it he said he wanted fish, and the fish came out till the floor was covered, but he didn't know how to stop it (the mill) and the fish came out of the windows (of the house, they were so many). He called his brother (the owner), who came and stopped it after a while. Men came over the oceans to see other lands and they heard about this mill, they came to see it, and they asked the Indian who owned it, if he would sell it. They were going to give him millions of dollars and so he let it go, for he wanted to be a millionaire. He told them how to start it, but he didn't tell them how to stop it, so they went away and put it on a big boat to take it home. When they were on the ocean there wasn't any salt so they started the mill and said they wanted "Salt" and the salt came out and out till it filled the boat. They told the mill to stop, but it didn't stop, and they didn't know how to stop it, so they had to throw it overboard, and to this day the mill is pouring out its salt, and so that's why the ocean is salty, and to this day some Indians believe this.

No. 380.

THE SUN'S FOOD.

Told by Mrs. Isabel Commanda.

In the morning before sunrise the sun is preparing his meals, first he eats the chickadee (chic-chic-gana-shene), which takes a short time to cook. Then we see the sun rising in the sky, after sunrise he is preparing the meat bird (Kwe-gwe-shi), which takes longer to cook. Then after the meat bird, he takes the partridge (Benah), which takes quite a while to cook, then his day's meals are done, and he sets in the west.

Note by G.E.L.—Nos. 380-381 were collected from North Bay, Ontario, Ojibwa, by Mrs. Exavier Commanda, from her mother-in-law, Mrs. Isabel Commanda.

No. 381.

THE MEAT BIRD.

Told by Mrs. Isabel Commanda.

It is believed by the Indians (that) if they want to find out if they are to kill any wild animals in one season, they kill this bird and put its feet near the fire, the skin to be pulled off (the feet). If the bird's feet have blood on the soles of the little feet it is a sign of good luck, and if they have a greyish color with no blood (it) is a sign of bad luck. This because the bird loves to eat meat.

Kwe-gwe-shi, is the Ojibwa name for this bird.

No. 385.

THE ORIGIN OF SEA-SHELLS.

Told by Mrs. Exavier Commanda.

Once upon a time, there were two grandsons. The old grandmother—Nokomis—took care of them. This old woman was a witch. This old woman wanted to get rid of these two boys and they knew, so they determined to run away from their old Nokomis (grandmother) so at night they ran off. They walked all night, by morning they reached the shore. They saw a gull—Kayoshk—sitting on a rock. They told Kayoshk to take them to some far off country where Nokomis can't get there, and Kayoshk the gull, consented. The oldest boy told Kayoshk "If the old woman's head sits on your head when it reaches us, just turn your head to one side and it will fall off"—it's the witch's power for its head to go about without the body—and they went off. When they got to the middle of the great lake this head reached after them. Kayoshk turned his head and the old witch's head fell down and broke into pieces, and they (the boys) said, that the pieces would be called "assance aug"—sea shells. And this is the end of the powerful head.

No. 386.

THE WOLF'S ORIGIN.

Told by Frank Commanda, Sr.

Once upon a time, a man had a son, one day they were having their dinner by the shore. This young Indian went out in the canoe and went to the point (a local spot), when he got there, the man called for his son, all he saw was an animal running out of the canoe and barking at him, and he said to his son "you shall be called a wolf—mahingan, by the Indians in time to come."

Notes by G. E. L.

Compare with No. 7, Ojibwa Myths and Tales, Page 14, Report 1915.

Nos. 385-386 were collected at North Bay, Ontario, by Mrs. Exavier Commanda.

No. 389.

SNAKE MEDICINE.

Told by Joe Cosh.

The story of an Indian, he wasn't very old, either. He was all the time going among the reserves of Indians, trying to find out everything about Indian medicine. There was one very bad old man in the Reserve, and he said to himself

"I fix this man that he won't be very long in this reserve with us, trying to find out about Indians and what they know about herbs." This bad old man took this young man to the bush and told him "You dig the roots of this," and he pointed to such a leaf and told him to keep it in his pocket, but this was a medicine for if a person is bitten by a snake, but nobody can carry that unless he is *bitten* by a snake. If you dig it for nothing you will see snakes, until they *bite* you. This young man kept it in his pocket and he saw snakes all around him, and some were going to climb on his legs, and he began to (get) frightened, so he got the bad roots and threw them away, and all the snakes went away from him. It was this bad old man that told him lies "that these were the best roots (medicine) for luck to get money." This ends the story of these two Indians.

Notes by G. E. L.

Re charms (medicine), Mr. Chas. E. Brown, Chief, State Historical Museum, Madison, Wisconsin, in a letter of 12th February, 1920, says: "I am pleased to learn of your investigations of the witch craft medicines among the Rama Chippewa. In my work among the Wisconsin Chippewa, I have heard some stories of the potency of charms (medicines), obtained by Indians, from old Indian women. These were curious and interesting. A young man was given a love charm which kept in his vest pocket had a tendency to draw his beloved to him. Another man received a charm which made him an always successful poker player. this he afterwards sold to another Indian for a good sum of money. An Indian going on a long journey over the trails received a charm which was to protect him, when he made his camp at night he found many snakes about, by strewing some of the powder about his fire and shelter in a circle he was able to drive them away. By enlarging the circle he was able to fully protect himself.

"There are many others like these, I have heard none concerning the 'witching' of whites."

No. 397.

The Man Who Was Cooked.

Told by Kenneth G. Snake.

Long time ago there lived a man who wanted to get married. He used to hunt for women, but he couldn't find any, so one day he was going away to some other place to look for one, on his way he killed a moose and he cleaned it and hung it (in a tree), and when he did that he said "I don't care what kind of woman I meet, even if she has legs on her head" so when he was coming out of the bush he saw a little hut nearby and he went in, and here's where he saw a woman with a leg on her forehead. The woman said "What do you want?" He told her that he wanted a wife. The woman said "I'll marry you," and the man said "allright!" He told her to make a fire while he went for the moose. The woman said she'd go after it, so he told her where it was and he watched her go out with one leg, when the woman was out he looked through a crack in the door. The woman pulled the leg from her forehead and put it on where it ought to be Well, the minute she did that the man knew that she wasn't a woman at all, she was the devil. He watched him (the devil) go into the woods and then he ran away, but the devil caught him and boiled him in a large kettle, and to this day the kettle is seen on Moon River, but some white man—who didn't know what

it was—filled it up with stones, and nearly all of it is under water now, there are so many dams in the river.

Note by G. E. L.—The kettle is evidently a "pot hole" caused by the action of the water on the rocks near a rapids or falls.

Moon River is in Conger Township near Bala Park, Muskoka, and the "pot" is near the mouth of the river Card. 7th June, 1921. K. G. Snake.

It was customary for the women to carry home the game the men killed.

No. 398.

The Indian Who Fought the Devil and the Spirit.

Told by Kennth G. Snake.

Once upon a time there lived a man where North Bay (now) is, and this man used to play cards all alone, and he used to play on a big stone, where he could see somebody (anybody) coming, and this time he was out there playing cards at midnight. He looked behind and he saw a man with fine clothes and he said to him (the stranger) "Would you like to play cards with me?" and (the other) said he would. Well, they started to play and every time he would beat (win from) this man who had the fine clothes. Well, when he (the stranger) was badly beaten, he said he'd like to fight, and they both jumped down (from the big stone) to the ground, and they started to wrestle, and he (the Indian) was kind of scared to put the other down, and the man with the fine clothes was the same, but the Indian put him down and there he kept him down, and he noticed something strange about that man, everytime he (the stranger) touched him (the Indian) he made a big scratch, and every time he'd scratch, the Indian would give him a blow on the eye, and, my, he scratched, and by day-break the man (stranger) was different. He had two horns and hooves, and a tail, and everytime the devil (formerly the stranger) touched the Indian it made a cut and it looked as if some one had hit him (the Indian) with an axe. He had to let the devil go, and when he let him go he didn't see him anywhere. Then in about one month's time, when he got better he was walking out in his garden thinking about the devil he had fought, when he looked up he saw a spirit or ghost, and he hit him on the face just as for fun, but he was flattened to the ground, the spirit hit him first. He jumped up and knocked the spirit down, and they kept on knocking each other down, sometimes he tried to wrestle with the spirit, and if he tried to grab the spirit he couldn't catch him at all, so he had to use his fists. When daylight came he was fighting with the spirit, but he couldn't see it. The Indian was like a fat man when he stopped fighting. He had swelled up from the blows of the spirit. About one week had past (after this) he said he was going to heaven so he started early in the morning, he was walking to heaven. Well, he got there somehow. He climbed upon the spider's web. After he got there he began to play cards with the angels, and one of the angels said "I'm going to tell on you for bringing cards up here, I'm going to tell God about it," but God said "Never mind, I gave that man that kind of life." They say he's in heaven yet.

No. 402.

How Nanbush Fixed the Eye of the Owl.

Told by Kenneth G. Snake.

Long, long ago when the world was young, there lived an owl (coo-cook-oo) and that's the only owl there was, and that owl used to find fault with every one. One day Nanbush came along to the forest and he hadn't anything to eat for a long time, and he called everybody, and he said to the animals and birds and every one "to sit down with their backs to him (Nanbush)," and, oh! Mr. Owl used to roll his eyes around and see what was at his back, and he wanted to know what Nanbush was doing, and Nanbush saw. If he (Nanbush) caught anybody looking he was going to fix their eyes. Mr. Owl rolled his eyes a little, but he rolled them quickly back because if Nanbush knew he would be punished, but Mr. Owl did it, and as he looked, Nanbush was pulling rabbit (wah-boose), by the ears and hind legs. The rabbit in those days had short ears and legs. Mr. Owl was seen looking, and Nanbush went after him and caught him. He made him (the owl) look in the same place all the time, and that's why a rabbit can't run, but jumps, and that's why the owl never rolls his eye to this day. He only turns his head to see what is at the back of him, and that is why owls don't come out in the day time, because he was so ashamed of himself, he doesn't want to come out in the day time.

No. 403.

The Race.

Told by Kenneth G. Snake.

Long, long ago, there was a race between the bears (mokwa) and the snapping turtles (mah-she-cay). The bears said they were going to eat up every Indian they saw, if they won the race, and the Indians won't run away, either, they just had to watch the bears eating, one by one, the Indians, and the snapping turtles were going to do the same to them ((?) the bears). The bears sat in a row with the Indians and they were going to have two races. The bears chose one of their best runners to run with the snapping turtle. It was winter, the turtles said that their chosen one shall go under the water, and they made holes in the ice, where they pretended the swimmer was going to look out of every once in a while, but there were lots of turtles, and there was one in every hole, when they got ready, the bear and the turtle were standing near the first hole and the second the (starting) word was heard the turtle went splash in the hole, and the bear was going (running), too, but he (the turtle) stayed where he was and the others (turtles), one by one, poked their heads out in the holes in front of the bear that was running, and at the very last hole the turtle there jumped out and cried out "I want water." He pretended he was very tired, well, the turtles won that race. The next day they were going to have a race in the field, and the turtles did the same. They made holes in the snow and at the last hole, the turtle jumped out again, and they won again. The Indians started to pound the bears on the heads and cooked them and the Indians and turtles enjoyed the feast, but a few of the bears ran away and that's why there's so few in the bush now, and that's why they all run away (presumably when they see a man).

No. 411.

The Story of the King Thrush Beard.

Told by Susie Commanda.

Once upon a time there was a king who had a daughter, beautiful beyond words, but so proud and haughty that she thought no lover, who came to woo, good enough for her, not only did she send them all away, but made fun of them into the bargain. The king gave a great feast and invited all the bachelors from far and near. They were all made to stand in rows according to their rank. First came the kings, next the princes, then the dukes, earls, lords and gentry, and the king's daughter passed down between the rows to choose, but she had some fault to find with each of them. One, she said, was as fat as a wine barrel, another too tall and lean, "Long and thin has little in" she laughed, mockingly. The next was too short, "Short and thick is never quick," she quoted. Another was too pale, another too red, and another not straight enough. So she went on like that making fun of all, but in particular of a good looking king, who stood right at the top of the row. He wore a short beard upon his chin, and the princess pointed her finger at it and cried "He has a chin like the beak of a thrush!" and from that time he was known by the name of "King Thrush Beard." But the king was so angry that he declared that his daughter should marry the first beggar-man who came to his door.

Two days later a fiddler came singing beneath the castle windows, hoping to earn a few pence. When the king heard him he ordered his servants to bring him in, so the beggar-man came into the king's hall, clad in his dirty, ragged clothes, and sang to the king and his daughter, and when his song was ended he begged for charity, and the king said "Your song has pleased me so well that I will give you my daughter for a wife." The princess cried out in horror, but the king said "I took an oath that I would give you to the first beggar-man who came by, and I will keep my word."

The princess' pleadings were all in vain. A priest was sent for, and she and the beggar-man were married, there and then. Afterward the king said "It is not fitting that a beggar-woman should remain in my castle any longer, so you might just as well go away with your husband at once," so the beggar-man took her hand and led her away, she was obliged to trudge on foot. Presently they came to a wood and she asked "To whom does this beautiful wood belong?" "To King Thrush Beard" answered the beggar-man, "If you had taken him it would have been yours." "Ah!" sighed the princess, "If only I had, unhappy maiden that I am." Soon afterwards they came to a meadow, and the princess asked "To whom does this lovely green meadow belong?" and the beggar-man answered "To King Thrush Beard, if you had taken him it would have been yours." "Ah!" sighed the princess "If only I had, unhappy maiden that I am." Next they came to a great town and again she asked "To whom does this fine town belong?" "To King Thrush Beard," answered the beggar-man, "If you had taken him it would have been yours." Ah." sighed the princess "If only I had, unhappy maiden that I am." Then the beggar-man said "It is not very pleasant to hear you wishing for another husband, am I not good enough for you?"

At length they came to a little tiny house, and the princess said "To whom does this tiny house belong? What a wretched little place it is." The beggar man answered "That is mine and thine, the little home where we shall live together." The doorway was so low that the princess had to bend her haughty head to enter.

"Where are my servants?" she asked. "You will have no servants but yourself," answered her husband "Come now, be quick and light a fire and put the kettle on to boil, I want my supper for I am very tired." But the princess knew nothing about lighting fires, or cooking food, and the beggar-man had to lend a hand himself, or he would have had nothing to eat. The next morning he made her get up very early, and do the work of the house, and so things went on for a day or two, and then when all the food had been eaten, he said, "Wife, we cannot go on like this, eating and drinking, and earning nothing, you must learn to make baskets," so he brought home willows to her and she tried to weave them into baskets, but the tough willows hurt her delicate fingers. Then said the beggar-man "This will never do, you better try spinning, perhaps that will be easier for you." So she sat down to spin, but the thread cut into her fingers so that the blood trickled down them. Then said the beggar-man "You are fit for no sort of work, I have made a bad bargain, but I will give you another chance, you shall take some pots to market and see if you can sell them." "Alas," said she, "If my father's subjects should pass by and see me selling pots and pans at the street corner, they will mock me." But all the same she was obliged to go, or she would die from hunger.

The first time every thing went well, the people bought the pots and pans just because the seller was so beautiful, many of them paying the price she asked and giving her back her wares, she and her husband lived for some time on the money she had earned, and then the husband bought a new lot of crockery, and she went to a corner of the market place, set out her wares, and waited for folks to come and buy her wares.

But suddenly a tipsy hussar came dashing down the market place right into the midst of her pots and pans and broke them into a thousand pieces. Then she began to cry "Oh! dear, Oh! dear, what shall I do? What will my husband say?" She ran home and told him of the misfortune; "Whoever heard of a person sitting at the corner of a market place when they had breakable goods for sale?" said he, "Well! It is quite plain that you are good for no ordinary kind of work, so I have been to the king's castle and have begged him to find you a place as kitchen maid. This they have promised to do and you are to have your food instead of wages." So the king's daughter was now compelled to go and serve as a kitchen maid, be at the cook's beck and call, and do the hardest and dirtiest work. In each of her two pockets she carried a little pot, and in these she put the scraps that were given her and carried them home, and upon this food she and her husband lived.

It happened that the king's eldest son was to be married and the poor princess crept to the door of the great hall that she might see some of the splendour of the wedding festivities. There, as she saw the lights flashing, and the noble people passing to and fro in their gorgeous clothing, she grieved from her heart that her pride and vanity had brought her to her present lonely lot.

The servants carrying costly food and drink, now and again threw her morsels and scraps in her two pots ready to carry home.

All at once the king's son entered, dressed in velvet and silk, and a golden chain about his neck. When he saw the beautiful woman standing in the doorway he seized her hand and would have had her dance with him, but she drew back with fear for she saw that it was King Thrush Beard, the suitor whom she had refused with scorn. But her struggles were of no avail. He drew her into the great hall, when, alas! the string which held her pockets snapped, the pots

and food fell to the ground, and the soup and scraps with which they were filled went in every direction. Oh! How the people did laugh and mock at her. She could have sunk into the earth with shame. She sprang toward the door and would have run away, but a man caught her, and brought her back, and as she looked up she saw that it was King Thrush Beard. He spoke kindly to her, saying "Do not be afraid of me, I am the beggar-man with whom you lived in the little house; for love of you I disguised myself so. I, too, was the hussar who broke all your crockery, and all this was done that I might humble your proud spirit and make you love me." Then the princess wept bitterly; "I am not worthy to be your wife," she cried. But King Thrush Beard kissed her and said "Take comfort, dear wife, the evil days are past and now we will keep our wedding feast."

The maids-in-waiting came and dressed her in beautiful garments of gold and silver, and her father and his court all came too, and wished her good luck and happiness in her marriage with King Thrush Beard, and then the festivities began in right good earnest and all I can say is, that I wish you and I had been there to see them. End.

Note by G. E. L.—This is a recent acquisition to the Ojibwa, collected at Lake Temagami (Bear Island).

No. 413.

Why the Perch Can't Kill Suckers.

Told by Mrs. Exavier Commanda.

There was an Indian boy named "Saw-wance." He was about sixteen years of age.

He was told not to kill the suckers for nothing, only what he wanted to use for his meals, but he did not obey "Nokomis" (his grandmother). He killed more for nothing.

One day he met two fine looking young men near the portage, and these men fought him near the portage, to throw him in the river, but he beat (bested) them. He threw the two men down at last. He did not know it was the suckers he was fighting with. That was all he saw when he threw them down. His grandmother told him not to mind the suckers any more. Saw-wance means perch, and he never was able to kill any (suckers) although he tried hard.

Note by G. E. L.—This is a personified story.

Perch.—Perca Flavescens. Ojibwa name Saw-wance.

Sucker.—(Common)—Catastomus commersonü, Ojibwa name Nemahbin.

No. 416.

Why the Buffalo has a Hump.

Nanbush Story No. 31.

Told by Kenneth G. Snake.

Long, long ago, the buffalo hadn't any hump. It was in the summer that he got the hump. He would race across the prairies for fun and the foxes would run a long ways ahead, and tell all the little animals to get away, that their lord (the buffalo) was coming. They didn't know that Nanbush was around there. So the buffalo raced across (the prairies). Little birds live on the ground and

the buffalo raced in that direction and tramped the birds nest and the little birds told him that he was going where the nest was, but he didn't heed a bit, and they were making a noise, crying for their nest, and when Nanbush heard them he ran ahead a little piece, ahead of the buffalo and foxes and stopped them. He had a stick and he hit the buffalo on the shoulders and the buffalo humped them up fearing that Nanbush would give him another blow, but Nanbush just said "You shall always have a hump on your shoulder and always carry your head low for shame." The foxes ran away and dug holes in the ground where they hid themselves, and Nanbush told them "To always live in the cold ground for their disobedience to the birds," and that is why the buffalo have humps now, and the foxes have holes in the ground as their homes.

No. 419.

How Nanbush Made a House for a Tortoise.

Nanbush Story No. 32.

Told by Kenneth G. Snake.

Long, long ago, when the world was young there were only two tortoises, and they didn't have their shells or their houses on their backs. They were all soft. It was this way that the strong began to hunt the weak ones, and the otter was going to eat the tortoise. One day the tortoise was going on land to take a walk, he didn't run fast, as he looked to see if the way was clear he saw the otter coming, so he just turned and crawled under a piece of bark, and then drew his head, legs and tail in, and when the otter was gone he went back to the pond where he lived, and he didn't know that Nanbush was watching him, how he saved himself. One morning Nanbush was out fishing, he asked the tortoise where the fish was plenty, he said "If you tell me where there's plenty I'll give you a house that you can carry on your back." Soon as the tortoise heard this he dived and looked for the spot where the fish were plenty, and in a little while he was back again, and told Nanbush where there were plenty of fish. Nanbush thanked him and got out of his boat with the tortoise and took him where there was a bit of bark and then he put it on the tortoise's back, and a piece on his stomach, and then they watched for the otter to come, and when he was coming the tortoise went and met him, and pretended that he didn't see him coming. When the otter saw the tortoise he sprang at it, and the tortoise only drew his head, legs and tail in, so that the otter didn't have a taste of him. After the otter went away, Nanbush told the tortoises that "From this day on every tortoise shall bear his shell or his house along wherever he went."

Note by G. E. L.—

Turtle.—Ojibwa name Me-squad-as.

Otter.—Ojibwa name Ne-gig.

No. 421.

Nanbush and the Mud Turtle.

Nanbush Story No. 33.

Told by Mrs. Exavier Commanda.

Once upon a time, the mud turtle had none of that hard stuff on his back, and they would have been all done away with if Nanbush hadn't pitied him. Nanbush was sitting by the side of a mountain on a big rock by the valley and there

came this turtle weeping that there will soon be no friend of his own kind, pretty soon, and Nanbush spoke to him and asked him what was the matter, and he told Nanbush his story, and Nanbush said "If you will only listen to me, my child, I will help you out when the stork (crane) comes. Creep under two big (pieces of) bark, and don't stick your head out till he passes by. When he has gone past you can go your own way, and you will be delivered from harm after this." When the stork came mud turtle did as he was told, and to his surprise he had a little house on his back and where ever he went he carried this house with him, and you can see him to this day that he has his house with him, put up by Nanbush in a wonderful manner.

Note by G. E. L.—Ojibwa name for crane is Shickee.

No. 424.

Why the Birch Bark is Spotted.

Nanbush Story No. 34.

Told by Kenneth G. Snake.

Long, long ago, when Nanbush was living, he was out hunting. He killed a lot of deer and other animals and he put them in his hut, and there was no door to it, and he thought it was safe in there when he went out looking for some more (game). All the birds came and ate up what he had. In the evening when he came home he found that this meat was all eaten and he looked all about in his hut, and in one corner he found the birds half dead, because they ate too much. There were some birch trees nearby and he went over to them and asked them "Why they didn't watch his meat?" And of course, the trees couldn't talk when he spoke to them, so he got mad (angry) and he went to a balsam tree and cut all the branches off and then he started to whip the birch trees and every time he hit all the things that's in the balsam (needles) stuck to the bark, and it made him more cross and he shook them off and when they came off they left marks, and he got so furious he ran in his hut and got all the birds and threw them against the trees and they didn't come off because he threw them so hard, so he found that when he got mad it was no use trying to clean the trees, so that is why the birch trees are like that in some places. The spots (on the bark) nearly look like crushed birds.

Notes by G. E. L.

Re spots on birch-bark, see page 83, and fig. 3. Notes on Timagami Folk Lore, Memoir 71. No. 9, Anthropological Series, Geological Survey, Ottawa, Ontario, 1915.

The small specks and stripes on the birch bark were caused by the balsam needles, when Nanbush struck the birch with balsam branches.

Re trees not answering Nanbush, this is contrary to the usual custom, for Nanbush had the power that all things, animals or inanimate, had to answer him when he spoke to them.

No. 425.

WHY THE PORCUPINE HAS QUILLS.

Nanbush Story No. 35.

Told by Kenneth G. Snake.

Long, long ago, when Nanbush was around the porcupines had no quills on them. A porcupine was out in the woods when the bear came along and would have eaten him, but he managed to climb to the top of a tree where the bear couldn't get him. The next day he was out again and he went under a hawthorn tree and he noticed how the thorns pricked him. He began to break branches off and put them on his back, then he went into the woods and along came the bear. He (the bear) sprang on him (the porcupine). The porcupine just curled himself up, and the bear had to go away for the thorns pricked him very much. Nanbush was watching them. He called the porcupine and asked him "how he knew such a trick?" The porcupine told him, and how he was in danger when the bear was near. Then Nanbush took some thorns and peeled the bark off till they were all white, then he put some mud (clay) on the back of the porcupine and then stuck the thorns in it, and then he made it as a skin, and then he told the porcupine to go in the woods, and when he got there, and Nanbush had hid himself behind a tree, along came the wolf who sprang on the porcupine and then ran away because of the quills, and the bear didn't go near him because he was afraid of those quills, and this is why the porcupines have quills to-day.

No. 430.

INDIANS WHO TURNED INTO BLACK SNAKES.

Told by Kenneth G. Snake.

Several years ago there lived a family on an island up north. This island is big and in it there is a little lake or pond. One day the old man was thinking of fishing in this pond, but there were no fish in it, and there was no creek to it, and one day this old man would just try to fish in it, after a while he caught a big sturgeon with no tail to it, which he was surprised to catch in that pond. Anyway he said "they would eat it." While the mother was cooking it, the eldest daughter went paddling in her canoe round the island. When she came back to have dinner she saw all her brothers and sisters were turned into big black snakes, and her father and her mother were just half turned into black snakes. So the mother had a chance to speak, and she said "Go, my daughter, before you are turned into a snake. When you hear us crying or yelling you'll know somebody will die, of the Indian (Ojibwa) tribe." And whenever they hear them (the snakes) somebody dies, and that island to this very day is filled with those black snakes, even in the coldest day in winter. This island is called Manito-negong, and is in Lake Nipissing.

No. 440.

WHY THE EAGLE IS BALD HEADED.

Nanbush Story No. 36.

Told by Kenneth G. Snake.

Long, long ago, when Nanbush was on earth, he was walking about the woods, when he saw an eagle flying about. He called it, but the eagle wouldn't come to him. He got mad (angry), he made himself look like a big bird, bigger than the eagle. Then he rose to the sky and made a cry that made the eagle fly up and up. He flew up after it, way up past the clouds, but on they went with Nanbush behind the eagle. Then it began to get warm near the sun. It got hotter and hotter. At last the eagle got burnt on the head going too near the sun, so they had to fly down, and Nanbush caught the eagle and took it to the ground, and told it "You shall never have any feathers on your head again, and you shall never come down close to the ground or you'll be killed," and that is why some eagles have bald heads.

Note by G. E. L.—Nanbush had the power that when he spoke to animals, or inanimate things they had to answer.

No. 441.

THE OLD WOMAN AND THE SERPENT.

Serpent Story No. 12.

Told by Kenneth G. Snake.

Several years ago there lived an old woman not far away, who used to know a big serpent. The serpent was in Lake Joseph, and in the summer she would go there to see her serpent, and she would go and buy some meat in a store and come back to feed the big snake that was in the water, and she said "if she missed one summer one of her cousins would die." It was as if the serpent was eating all the cousins. And this went on all the time, missing one summer, and then she would see it again. Soon all her cousins were dead, then it came to her son. Next year her daughter was dead. Then she worked hard to feed the serpent. She was alright for five years. Every time there was a thunder storm this old lady was scared because the serpent, she knew, was afraid of the thunder. Then one year she forgot to go and see the serpent, then she died. The old lady I am telling you about was Mrs. Elisabeth Shilling (Ojibwa woman).

Note by G. E. L.—Lake Joseph is in Muskoka, Ontario.

No. 442.

THE BOY THAT TURNED INTO A WOLF.

Told by Kenneth G. Snake.

Long, long ago, two little boys were playing together near a bank (of the river), one boy saw that the other side was much prettier, so he swam across, but the other one could not swim, and the boy that could not swim took the canoe over and he played along the shore and then he went away and forgot all about his brother. One day he went back to see if he was there, when he was a little way off he heard him crying like a cat; he thought it was so. He went on, when he got to the shore he saw him (his brother) sitting as before, only he was like a big dog, but he spoke to it "I shall call you wolf," and the boy that was changed said "I am going to eat you if you don't go away" so the boy had to run away, and that was the first wolf. Mah-eng-gan.

HOW THE BEAVER INDIANS REGAINED SUMMER

By Mr. Bourassa, Fort Vermilion.

Once upon a time the Beaver Indians lived together in one great camp in the Peace River country. The widows were segregated from the main camp by means of a trail which divided and kept them apart from the rest of the Indians. Moose were plentiful and the widows' work was to dry and prepare all the skins and work them into mocassins and other articles needed by the tribe. One night the widows heard a baby crying and searching around they found a little boy lying in some moss. Enquiry was made all through the main camp but no one claimed the baby. One of the widows adopted the little one and in due time he grew to manhood and became a great prophet. He exercised a wonderful power over all the animals and by means of speaking could make them subservient to his will. One day the prophet told the Beaver Indians that the people living in the south-west had taken away their summer and that was the reason their country was so cold. A little later on the prophet started for the west taking with him a small party of Beaver Indians and several animals. They travelled on and on and finally reached a wall which barred further progress. The wall was white and very high and in length appeared to be unending. The prophet directed the beaver to try and cut through the wall but after blunting his teeth he had to give up. The crane was then instructed to try and punch a hole and was successful in getting his bill and neck through but in doing so lost the long feathers from his neck. He persevered until he had made a large enough hole for the prophet and his party to crawl through. The prophet then explained to his Indians that the summer was kept in a bladder basket and was suspended from a tree which was guarded day and night by two old women. In order to find out the strength of the people the prophet said to the night owl you can see in the dark so we will wait for the night then you will find the people living alongside a lake. The owl carried out the instructions given and on his return said the people are too many for us to try and take the summer from them; they are well provided with canoes and paddles and bows and arrows.

After hearing the owl's story the prophet said we will try and take our summer from them by stratagem and not try fighting and the following plan was outlined. The beaver was instructed to enter the lake and under cover of the water to approach the canoes and gnaw a hole through each one and to partly bite through every paddle. The mouse was told to cut nearly through the string of each bow. The fisher was told to get as near the tree as possible and be in readiness to climb the tree and secure the basket by cutting through the cords which secured it to the tree. After this was carried out the Caribou at break of day would run between all the camps and excite the dogs and after doing this he was to take to the water for, said the prophet, you are a good swimmer. After the prophet had explained the plan the beaver and mouse started off and carried out their part. At break of day the Caribou ran in and out of all the camps and was chased by the dogs who by their own barking aroused the whole camp. The Caribou having successfully done his part took to the water and made his escape. The fisher followed in the wake of the Caribou and while the dogs were chasing that animal he climbed the tree and secured the basket. In the meantime the people followed the dogs and when they saw the Caribou take

to the water rushed for their canoes, but also when they had started each boat began to fill with water and each paddle broke off short when used in the water. They then attempted to shoot at the Caribou but here again the bow strings parted and they could do nothing and under cover of all this excitement the fisher escaped from the camp with his precious basket. Needless to say the attention of the two old women guardians of the tree and summer in the basket was diverted to what was taking place on the water. In due time all reached the prophet who took the bladder from the fisher and retracing their steps and after passing through the wall the prophet pointed the bladder toward the north and burst it. Summer thus liberated reappeared in the North once more and the wall in process of time became the Rocky Mountains.

NEW ACCESSIONS TO MUSEUM

The new accessions to the Ontario Provincial Museum during the past year have been very numerous as may be seen from the catalogue. In fact, so great have been those acquisitions that we have not been able to secure sufficient space for exhibition purposes. The late G. J. Chadd of Trenton, Ontario, spent nearly half a century collecting material from Prince Edward County and the surrounding counties. Mr. Chadd stored all his material in a large museum building expressly built for the purpose. This museum contained the finest private archæological collection in Canada. Here also he collected and housed fossils, illustrative of the entire district, estimated at considerably over half a ton; a large biological collection, and in addition nearly all the implements used by the first settlers in this district. Mrs. and Miss Chadd felt the burden of looking after the museum was getting too great and they were very anxious that the collection should not go out of their native province. So the province is indebted to Dr. Grant, Minister of Education, Mrs. and Miss Chadd, and the Rev. Canon Young for the securing of the same for the Ontario Provincial Museum. The new accessions for this year to be described, will be selected from the Chadd collection. This collection not only represents the artifacts from the Bay of Quinte district, but also those of many tribes in New York State. Wellers Bay and the mouth of the Trent river were the ports on the north side of Lake Ontario through which passed not only the Iroquois hunters whose fields were all situated in eastern Ontario and extending north of Nipissing and Lake Timiskaming. It was also the portage used by Iroquois war parties going north-westward to the Huron country. Therefore many of the artifacts illustrated will be traceable to the tribes of New York State.

The following bird amulets are all from the Chadd Collection.

No. 38480. From Wellington, Prince Edward County. Made of light-colored banded slate, with two holes, one at each extremity. It has a flat base, as usual, two inches in length by nearly one inch in width.

No. 38477. Also from Wellington, Prince Edward County. Made of Huronian slate, with only one hole, which was at the front extremity but is broken out, the weight of the article having been too great for the frail perforation. It has greatly exaggerated eyes to indicate powerful eyesight on the part of the bird represented. The flat base is three inches in length and nearly one inch in width at the broadest part, which is at the rear extremity.

No. 38478. From Picton. Made of beautifully banded Huronian slate, with only one hole at the front, like the preceding example. It also has exaggerated eyes. The flat base is three inches in length and one inch wide at the broadest part at the rear extremity.

No. 38467. From Trenton Mountain. Made of beautifully mottled slate, with two holes, one at each extremity. The flat base is two inches in length by three-quarters of an inch wide.

No. 38466. From Trenton Mountain. Made from dark-colored, banded slate that takes a fine polish. It has two holes, one at each extremity. The flat base is three and a half inches long and half an inch broad.

No. 38470. From Wellington, Prince Edward County. Made from banded slate. It has much exaggerated eyes but the base is too narrow for any perfor-

Bird Amulets—Full Size.
Nos. 38,480, 38,477, 38,478, 38,467, (Read from top down).

BIRD AMULETS—Full Size.
Nos. 38,466, 38,470, 38,469.

Bird Amulets—Full Size.
Nos. 38,461, 38,462, 38.479, 38,463. (Read from top down).

BIRD AMULETS—Full Size.
Nos. 38,475, 38,465, 38,474.

BIRD AMULETS—Full Size.
NOS. 38,464, 38,471.

ations for suspension. The imperfectly flat base is slightly curved upward at each end, with a length of three and three-quarter inches, but it is nowhere quite half an inch in width.

No. 38469. From Wellington, Prince Edward County. Made of light-colored slate. It had exaggerated eyes, but the head is somewhat fractured. It has two holes, one at each extremity. The perfectly flat base is three inches and three-quarters long and three-quarters of an inch broad at the widest part at the rear extremity.

No. 38461. From Indian Island, Bay of Quinte, Prince Edward County. Made from banded slate that receives a high polish. It has two holes for suspension in carrying, one at each extremity. Its flat base is two inches and a quarter long and an inch and an eighth broad at its central part where it is widest.

No. 38462. From Big Island, Bay of Quinte. Made from dark slate faintly banded. It has two holes as usual but both are broken out, and a second hole made at the front, which also is broken out. It has exaggerated eyes, which are so common amongst these amulets. The flat base is three inches and a half long, and half an inch broad.

No. 38479. From Lot 22, River Road, Trenton. Made from very dark slate (banded). It has likewise exaggerated eyes. The two holes are of excellent workmanship. The irregularly flat base is two inches long and an inch and a half broad at the central part.

No. 38463. From Big Island, Bay of Quinte. Made from Huronian slate with banding less distinct than in most cases. It has exaggerated eyes. The irregularly flat base is two inches long and an inch and three-quarters broad at the central part.

No. 38475. From Wellington, Prince Edward County. Made from dark banded Huronian slate. It has two holes, one at each extremity, well formed. Its flat base is three inches long and three-quarters of an inch broad.

No. 38465. From Trenton Mountain. Made from banded Huronian slate. It has two well-formed holes, one at each extremity. Its flat base is three inches and three-quarters long and only three-quarters of an inch broad.

No. 38474. From Wellington, Prince Edward County. Made from banded Huronian slate, and has two well-formed holes. The flat base is three inches and a quarter long and three-quarters of an inch broad.

No. 38464. From Big Island, Bay of Quinte. Made from banded Huronian slate, with dark shades. The head and the tail are lost. It has two well-formed holes. The flat base is two inches and three-quarters long and an inch broad at the central part where it is widest.

No. 38471. From Wellington, Prince Edward County. Made from banded Huronian slate. The head is lost, and the fracture has been smoothed. It has two holes well formed and buttressed by ridges left upon the base. The irregularly flat base is two inches and a half long and an inch and a quarter wide at the widest part.

Stone Pipes.

No. 39143. The interesting effigy pipe from Picton, shown at the first of this group, represents an owl. The back of the bird is fluted, as in so many other examples of these effigy owl pipes. The owl's talons are represented in

STONE PIPES—Full Size.

No. 39,143	No. 39,141	No. 39,142
No. 39.328	No. 39,197	No. 39,139

the usual way found in bird pipes, and are perforated for the insertion of a string or other support. The pipe is made from a soft, workable stone of grey color, and a stem, more than an inch in length, has been worked from the material, which had proved so suitable for working into any shape by the maker.

No. 39141. A small black stone pipe, of a broad type, also comes from Picton. The material from which it is made has taken a good polish.

No. 39142. The pipe represented is also from Picton, and is made of grey stone that has taken a good polish. The bowl makes a very broad angle with the stem, the deviation of the former from the line of the stem making only about half of a right angle.

No. 39197. This fine specimen of the platform pipe comes from Wellington in Prince Edward County. It is made from a grey stone and has a long, slender base, four inches and a quarter in length. Pipes of this class have been found most commonly amongst the remains of the "moundbuilder" Indians of the Ohio Valley and adjacent parts, and were formerly attributed exclusively to those people, but examples of the same type have been coming to light in a wider range of territory than was at one time known.

No. 39328. This is another platform pipe made of similar material and having the same shape as the last example. It comes from Picton, near the same place as No. 39197, but one arm of the base has disappeared and a part from the lip of the bowl. Notwithstanding this, it is a good specimen of the "moundbuilder" pattern.

No. 39139. An interesting grey stone pipe from the Carrying Place. Besides the cording worked around the top of the bowl, and a number of flutings worked into the base, it has eleven dots drilled into the material on the side shown, and five long scores on the opposite side.

No. 39205. A black stone pipe from Wellington in Prince Edward County. The stem makes a very broad angle with the bowl; in fact, the bowl is only slightly bent out of the line of the stem, and it might almost be called a tube pipe. There is a perforation in the base near the bend, besides the usual stem hole.

No. 39149. A stone pipe having an interesting and unusual shape. It comes from Picton and it is made from a variegated black and grey stone. The bowl is differentiated from the rest of the pipe by two scores which meet at a point, as shown in the engraving. A cross section of the pipe makes a triangle, almost right-angled, with the right angle along the base.

No. 39199. This pipe contains similar material to the last example, but a cross section makes a quadrilateral instead of a triangle. It comes from Wellington in Prince Edward County. The bowl makes a sharper angle with the stem than in the last example.

No. 39201. A black stone pipe also from Wellington. The cross section makes an oval. The angle of the bowl with the stem is broad, as in so many examples of these stone pipes.

No. 39148. This well formed specimen was carved from grey colored stone, locality, Picton. It has a circular cross section, and the angle of the bowl with the stem is also very broad.

No. 39459. This pipe has a most interesting shape, as the bowl culminates in four knobs, parts of which have been slightly knocked off but rebuilt by a former owner of the specimen. It is carved from light grey stone. It was

STONE PIPES—Full Size.

No. 39,205	No. 39,149	No. 39,199
No. 39,204	No. 39,148	No. 39,459
No. 39,325		No. 39,326

STONE PIPES—Full Size.

No. 39,241 No. 39,346 No. 39,243
No. 39,211 No. 39,163 No. 39,214

found upon Bald Head, the north end of the long spit or beach which encloses Wellers Bay, near the neck of Prince Edward County, or Carrying Place. There is a small hole perforated through the tip at the bottom of the pipe.

No. 39325. This is another pipe of the platform pattern, made from dark colored stone, slightly different in the shape of the bowl from the former specimens. It was found in Murray Township.

No. 39326. This pipe is a specimen of the well known bottle-stopper pattern, made from drab-colored stone. It comes originally from the Carrying Place in Prince Edward County.

Clay Pipes.

No. 39241. This specimen has a human face effigy on the front and another on the back, of the bowl, but neither of the faces shows much skill in workmanship. The design and the markings on the sides are interesting, similar ones being rare. Locality, Wellington, in Prince Edward County.

No. 39346. This has but one human face effigy, facing the smoker. It is better formed than the last example, and has two prominent hair knobs. The mouth is open, as often occurs with this class of effigies. This pipe comes from Indian Island in the Bay of Quinte, (a small island of ten acres, or less, situated only about a mile off the carrying Place).

No. 39243. This is another pipe from Wellington, in Prince Edward County. On the bowl there is a small full figure effigy apparently intended to represent a human form climbing a tree.

No. 39211. The bowl decorations of this pipe are a belt of cords or grooves and a row of dots. The specimen also comes from Wellington.

No. 39163. The human face effigy on this pipe has been formed with rather more skill than any of the preceding specimens, and is an unusual and striking example of American Indian art. It comes from Picton.

No. 39214. This is also a good specimen with a curved and slender stem. Some red paint, with which it had been smeared, still adheres to parts of the bowl. It comes from Wellington in Prince Edward County, from which many of the other specimens have been obtained.

Small Stone Implements.

A number of small stone implements, triangular in shape, are in the Chadd Collection. Articles of this kind are sometimes classed with the chisels, but they are not capable of bearing much strain, from the weakness of the stone material of which they are made.

No. 39789 is made from a light grey, granular stone, with a length of one inch and seven-eighths. It comes from Lot 21, Concession 3, Hillier Township.

No. 39788 also from the same place, is also made from granular stone, but has a finer texture than the last example. It has the same length.

No. 38591 is of still finer texture than the two preceding, and dark grey in color. Its length is two inches and a quarter. This specimen is from Bald Head, as are also the three following.

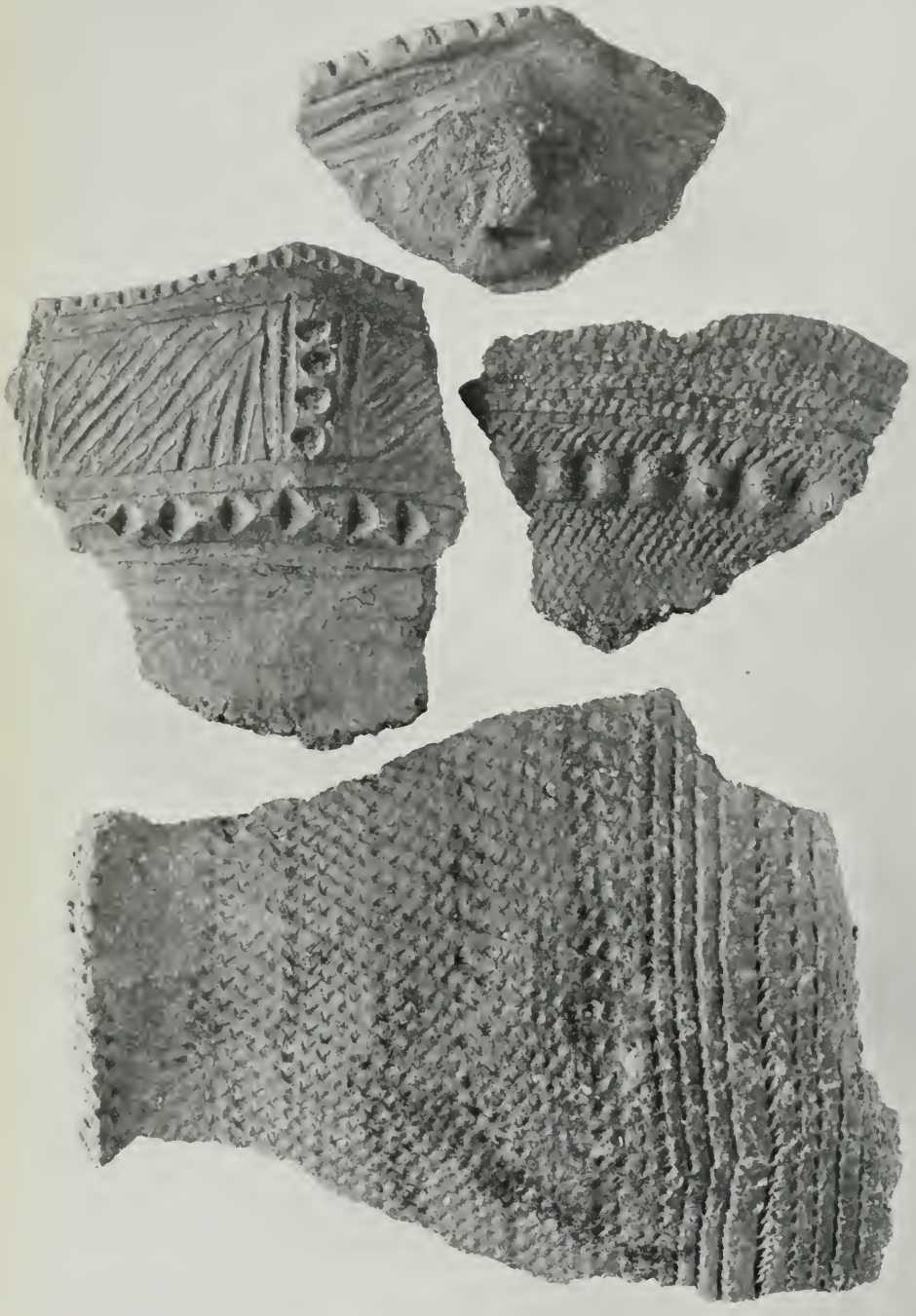
No. 38590. This specimen is made from a purplish colored stone, and has a length of two inches and three-quarters.

No. 38682. The specimen is drab-colored and has nearly the same length as the next preceding.

SMALL STONE IMPLEMENTS—Full Size.

No. 39,789
No. 39,788
No. 38,591
No. 38,590
No. 38,682
No. 38,589
No. 38,813

Ice Picks.
Nos. 38,804, 39,321, 38,805, 40,051.



POTTERY—Full Size.
No. 39,704

No. 39,906

No. 39,936

No. 38589. It is made from a blackish-colored stone, two inches and three-quarters in length.

No. 38813 is the only specimen in this group made from banded slate. It is more pointed than the others, and has a length of three inches. It comes from Lot 3, Concession 1, Hallowell Township, near Wellington.

Ice Picks.

Several very interesting ice picks of smooth stone are included in the Chadd Collection.

No. 40051. This specimen is sharpened at both ends like a chisel or axe. It is made from dark grey stone and has a length of eleven and a half inches. It comes from Consecon in Prince Edward County.

No. 38805 has round tips but one end has been fractured off. The implement is now 13 inches in length. The material is black stone. The specimen comes from Lot 3, Concession 1, Hallowell Township, near Wellington.

No. 39321. This specimen is also sharpened round at both ends. It is made of dark grey stone and has a length of fourteen and one half-inches, the longest specimen in the group. It comes from Hillier Township.

No. 38804. This pick is sharpened flat at both ends, and is made from black stone. Its length is fourteen inches. It comes from Lot 3, Concession 1, Hallowell Township, near Wellington.

Pottery.

The pottery used in the locality in which the Chadd Collection was formed had evidently been elaborately decorated, as appears from the fragments that accompanied it.

No. 39704 is a pot ear bearing a human face effigy. This kind of decoration is not common. The specimen is from Ameliasburgh Township.

No. 39906 is another pot ear very highly ornamented. This comes from Wellers Bay.

No. 39936. This specimen is unique in having a row of knobs formed by pushing a pointed implement against the inside of the plastic clay pot. In addition to this, and a series of cordings around the top, the specimen is covered with minute dots made by a very fine point. It also comes from Wellers Bay.

The large fragment at the bottom of the group has been most elaborately worked.

Arthur C. Parker, M.Sc., State Archæologist of New York, says:—

"The top sherd and the one below it and to the right are 17th century Iroquois products.

"The paddled design sherds are Algonkian. The fact that the two designs were found on one site only means that two pots, from the hands of different peoples, were broken on the same spot.

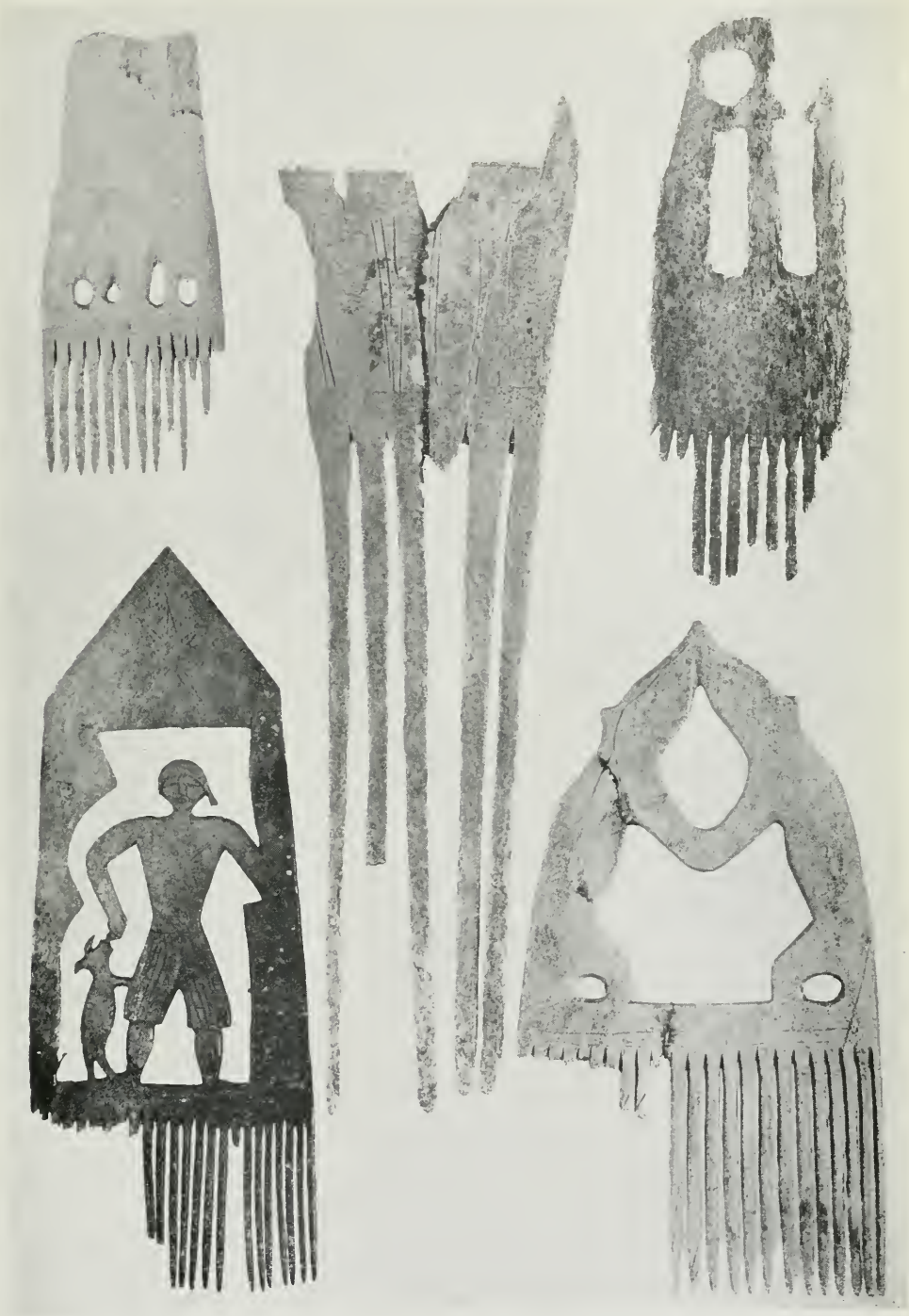
"The Iroquois design is typical of the period 1600-1620, the modelled face being a good clue.

"The stamped Algonkian pattern, no doubt, has the decoration carried down inside the lip.

"Each of these designs is as distinctive in origin as a French vase is from one from Japan."

BARBED BONE SPEAR-HEADS—Full Size.

No. 39,729 No. 39,653 No. 39,658 No. 39,655 No. 39,660 No. 39,731



BONE COMBS—Full Size.

No. 41,376

No. 40,592

No. 41,375

No. 40593

No. 39,516

Barbed Bone Spear-Heads.

No. 39729 has six barbs and the perforation for a cord. It is a very complete specimen, thus being an exception to the rule. It comes from Bald Head near the Carrying Place. Harpoons of this kind are a numerous class in Canada, but they seldom have so many barbs as this specimen, and are rarely so well preserved and complete.

No. 39653. This is only the fore part of the harpoon, and the same must be said of the other four specimens, showing the uncertainties of this class of implements. There are four barbs on this remaining portion. It comes from the Sand Banks, Prince Edward County.

No. 39658 has four barbs, and is also from the Sand Banks.

No. 39655 comes from the same place but has three barbs.

No. 39660, from the same locality, is the tip of a spear on which only two barbs are left.

No. 39731 is the fore part of a large spear, containing four barbs. It comes from Bald Head.

Out of six specimens only one is complete, which gives the student of aboriginal life an idea of the mishaps to which the harpoon is liable.

Bone Combs.

No. 41376. This comb has a length of three inches and a half, and its design bears evidence of aboriginal workmanship. It comes from the Carrying Place.

No. 40592 is six inches in length, and comes from Smokes point, Wellers Bay. The striped breeches and the toque on the head of the human figure indicate an early French origin of this specimen.

No. 41375 has a total length of eight inches, being more than the usual length of combs, and the long, slender teeth form the chief part of the specimen. It comes from the Carrying Place.

No. 40593 is four inches and a half in length, but its material is much corroded with age or weathering. It comes from Smokes Point, Wellers Bay.

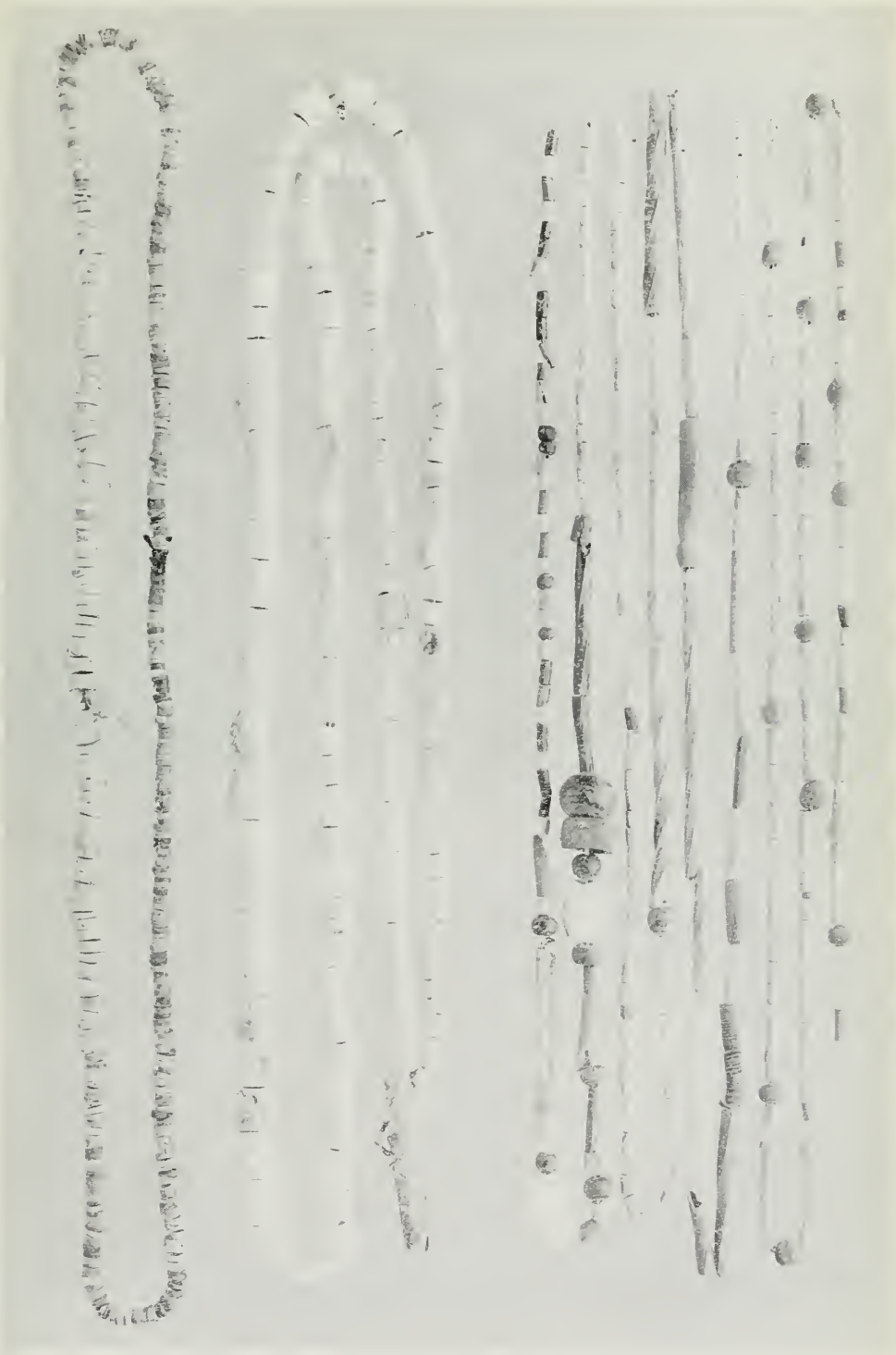
No. 39516. This unique specimen is five inches and a half in length and comes from Bald Head. The design is well worked and represents two osculating bears.

Small Shell Pendants.

The first five specimens in the engraving are bird beads (Nos. 39820, 39819, 38628-29-30,) and have lateral perforations (one in each) through the neck, for the purpose of suspension on a string. Each seems to represent a swimming water-fowl, probably a duck.

The small crescent at the bottom of the engraving has two perforations, and has the curve of the original shell from which the specimen was made. Crescents of this kind were used to intersperse with beads in making strings of beads.

These specimens are white, and have designs carved upon them by a pointed tool, the effect in some cases being artistic.



WAMPUM AND OTHER BEADS.
Nos. 38,615, 39,816, 39,385.

Wampum and other Beads.

No. 39385. Beads of shell, pipestone, etc., having a variety of colors. They are of various lengths and shapes, one of them being three inches and a half long. There are some glass beads from traders amongst them, but the majority are of aboriginal workmanship. The columella of large shells was used to form some of the beads. They form a long string, and are from the Carrying Place.

No. 39816. These are shell beads of larger sizes than most of the preceding, white and of aboriginal make. They come from Ameliasburg Township.

No. 38615 consists of shell beads with a few bone ones, but of smaller sizes than the next preceding. They have a variety of colors. Locality, Picton.

Small Shell Pendants—Full Size.
Nos. 39,820, 39,819, 38,628, 38,629, 38,630, 41,377.

NEW MATERIAL

CHADD COLLECTION.

No. 38460-40900—Procured from Mrs. I. Chadd, Trenton, Ont

38460—Bar amulet, Murray Tp.
38461—Bird amulet, Indian Island, Prince Edward Co.
38462-38463—Bird amulets, Big Island, Prince Edward Co.
38464—Part of amulet, Big Island, Prince Edward Co.
38465-38467—Bird amulets, Trenton Mountain.
38468—Bar amulet, Trenton Mountain.
38469-38470—Bird amulets, Wellington, Prince Edward Co.
38471—Amulet, Wellington, Prince Edward Co.
38472-38473—Bar amulets, Wellington, Prince Edward Co.
38474-38475—Bird amulets, Mount Pelion, Trenton.
38476—Bar amulet, Found in Trent River, Trenton.
38477—Bird amulet, Wellington, Prince Edward Co.
38478—Bird amulet, Picton.
38479—Bird amulet, Lot 22, River Road, Trenton.
38480—Bird amulet, Wellington, Prince Edward Co.
38481-38482—Fragments of bird amulets, Wellers Bay.
38483—Bar amulet, Wellington, Prince Edward Co.
38484-38516—Axes or adzes, Picton and Athol Tp.
38517-38542—Axes or adzes, Wellington, Prince Edward Co.
38543-38550—Axes or adzes, Carrying Place.
38551-38552—Long stone implements, Carrying Place.
38553-38554—Fragments of stone implements, Carrying Place.
38555-38556—Rubbing stones, Carrying Place.
38557—Part of banner stone, Carrying Place.
38558—Large grooved axe, Lot 9, Con. 1, Murray Tp.
38559—Bone spear, Bald Head, Prince Edward Co.
38560—Bone awl, Bald Head, Prince Edward Co.
38561-38569—Horn implements, Bald Head, Prince Edward Co.
38570-38580—Axes or adzes, Bald Head, Prince Edward Co.
38581—Sinker (stone), Bald Head, Prince Edward Co.
38582-38584—Gorgets, Bald Head, Prince Edward Co.
38585—Stone pipe, Bald Head, Prince Edward Co.
38586—Stem of stone pipe, Bald Head, Prince Edward Co.
38587—Stem of clay pipe, Bald Head, Prince Edward Co.
38588—Fragment of clay pipe bowl, Bald Head, Prince Edward Co.
38589-38591—Small stone implements, Bald Head, Prince Edward Co.
38592—Beads, Bald Head, Prince Edward Co.
38593-38594—Metal arrow points, Bald Head, Prince Edward Co.
38595-38607—Horn awls, Bald Head, Prince Edward Co.
38608-38610—Bone awls, Bald Head, Prince Edward Co.
38611—Gorget, Bald Head, Prince Edward Co.
38612—Large charred bone implement, Bald Head, Prince Edward Co.
38613—Stone chisel, Bald Head, Prince Edward Co.
38614—String of Indian beads, Picton.
38615—String of wampum, Picton.
38616—String of beads and wampum, Picton.
38617—String of wampum, Picton.
38618—String of bone and shell wampum, Picton.
38619—String of small shells, Picton.
38620—String of glass beads, Picton.
38621—String of wampum, Picton.
38622—String of glass beads, Picton.
38623—Seventy-five small copper beads, Picton.
38624—One hundred and fifty small shells, Picton.
38625—Fifty chert specimens, arrowheads, and scrapers, Picton.
38626—Fifty-five specimens, arrowheads and scrapers, Bald Head.
38627—Bone bead, Picton.
38628-38630—Small shell pendants, Picton.
38631-38655—Brass arrow-points, Bald Head.
38656-38659—Brass bangles, Bald Head.
38660—Small metal cross, Bald Head.
38661—Fragments of stone pipe, Bald Head.
38662—Animal head from a clay pipe bowl, Bald Head.
38663-38667—Old knife blades, Picton.

38668—Metal spike, Picton.
38669-38674—Old knife blades, Bald Head.
38675—Small bayonet, Bald Head.
38676-38678—Metal spear-heads, Bald Head.
38679—Metal spoon, Bald Head.
38680—Fifty chert specimens arrow-heads, etc., Bald Head.
38681—Gorget, Bald Head.
38682-38683—Small stone implements, Bald Head.
38684-38685—Strings of beads and wampum, Bald Head.
38686-38687—Shell beads, Bald Head.
38688—Clay pipe bowl, Bald Head.
38689-38705—Horn implements, Bald Head.
38706-38708—Bone awls, Bald Head.
38709-38711—Iron tomahawks, Murray Tp.
38712-38731—Stone axes or adzes, Murray Tp.
38732-38767—Stone axes or adzes, Lot 1, Con. 1, Murray Tp.
38768—Iron tomahawk, Lot 1, Con. 1, Murray Tp.
38769-38770—Drills (chert), Lot 1, Con. 1, Murray Tp.
38771-38796—Axes or adzes, Bald Head.
38797—Large red chert spear-head, Lot 3, Con. 1, Hillier Tp.
38798—Stone knife, Lot 3, Con. 1, Hillier Tp.
38799—Large chert spear-head, Lot 3, Con. 1, Hillier Tp.
38800—Sand stone implement, Lot 3, Con. 1, Hillier Tp.
38801-38803—Stone tubes, Lot 3, Con. 1, Hillier Tp.
38804-38806—Ice picks (stone), Lot 3, Con. 1, Hillier Tp.
38807-38809—Points of ice picks, Lot 3, Con. 1, Hillier Tp.
38810—Long stone implement, Lot 3, Con. 1, Hillier Tp.
38811-38813—Sharp-pointed stone implements, Lot 3, Con. 1, Hillier Tp.
38814—Paint stone, Lot 3, Con. 1, Hillier Tp.
38815—Rubbing stone, Lot 3, Con. 1, Hillier Tp.
38816—Axe or adze, Lot 3, Con. 1, Hillier Tp.
38817-38818—Small hammer stones, Lot 3, Con. 1, Hillier Tp.
38819—Sinker (stone), Lot 3, Con. 1, Hillier Tp.
38820—Sinker (fossil), Lot 3, Con. 1, Hillier Tp.
38821—Small piece of well-worked pottery, Lot 3, Con. 1, Hillier Tp.
38822—Horn awl, Lot 3, Con. 1, Hillier Tp.
38823—Eighteen chert specimens, Carrying Place, Prince Edward Co.
38824—Gouge, Carrying Place, Prince Edward Co.
38825-38849—Stone adzes or axes, Carrying Place, Prince Edward Co.
38850—Part of ice pick, Carrying Place, Prince Edward Co.
38851-38871—Stone adzes, Wellington, Prince Edward Co.
38872—Gouge, Carrying Place, Prince Edward Co.
38873—Gouge, Picton.
38874—Gouge, Murray Tp.
38875-38880—Gouges, Bald Head.
38881-38886—Gouges, Athol Tp.
38887-38890—Gouges, Lot 5, Con. 1, Murray Tp.
38891-38893—Gouges, Carrying Place, Prince Edward Co.
38894-38898—Iron tomahawks, Bald Head.
38899-38900—Iron tomahawks, Coe Hill, Wollaston Tp.
38901—Iron tomahawk, Smokes Point, Wellers Bay.
38902—Iron tomahawk, Trenton.
38903—Iron tomahawk, Indian Island, Bay of Quinte.
38904-38906—Iron tomahawk, Carrying Place.
38907-38934—Axes or adzes, Wellington, Prince Edward Co.
38935-38937—Chisels (stone), Wellington, Prince Edward Co.
38938-38939—Small stone implements, Wellington, Prince Edward Co.
38940-38963—Axes or adzes, Lot 9, Con. 1, Murray Tp.
38964—Fragments of ice pick, Lot 9, Con. 1, Murray Tp.
38965-38979—Axes or adzes, Lot 19, Con. 1, Hillier Tp.
38980-39005—Axes or adzes, Murray Tp.-Hillier Tp.
39006-39035—Axes or adzes, Hillier Tp.
39036-39051—Axes or adzes, Wellington.
39052—Gouge, Wellington.
39053-39081—Axes or adzes, Indian Island, Bay of Quinte.
39082-39116—Axes or adzes, Sand Banks, Prince Edward Co.
39117—Fifty-four chert specimens, Smokes Point, Wellers Bay.
39118—Large quartz spear-head, Smokes Point, Wellers Bay.
39119—Large stone spear-head, Smokes Point, Wellers Bay.
39120-39121—Large slate spear-heads, Smokes Point, Wellers Bay.
39122-39132—Arrow-heads, Smokes Point, Wellers Bay.

39133-39134—Chert drills, Smokes Point, Wellers Bay.
39135-39136—Catlinite pipe, Illinois State, U.S.A.
39137—Stone pipe, Picton.
39138—Stone pipe, Milford.
39139—Stone pipe, Carrying Place.
39140-39144—Stone pipes, Picton.
39145—Stone pipe, Wellers Bay.
39146-39152—Stone pipes, Picton.
39153-39156—Fragments of stone pipes, Picton.
39157-39159—Fragments of stone pipes, Murray Tp.
39160-39163—Clay pipes, Picton.
39164-39178—Clay pipe bowls, Picton.
39179-39196—Clay pipe stems, Picton.
39197-39200—Stone pipes, Wellington, Prince Edward Co.
39201—Stone pipe, presented by "Buck Shot Bill" to W. C. Chadd, Esq.
39202—Large sand-stone pipe, Wellington, Prince Edward Co.
39203-39207—Stone pipes, Wellington, Prince Edward Co.
39208-39209—Stone pipe stems, Wellington, Prince Edward Co.
39210-39218—Clay pipes, Wellington, Prince Edward Co.
39219-39259—Clay pipe bowls, Wellington, Prince Edward Co.
39260-39272—Clay pipe stems, Wellington, Prince Edward Co.
39273-39285—Iron tomahawks, Wellers Bay.
39286—Iron chisel or chalking tool, Wellers Bay.
39287-39305—Gouges, Picton.
39306-39307—Gouges, Hillier Tp.
39308—Gouge, Picton.
39309—Gouge, Hillier Tp.
39310-39311—Gouges, Stockdale, Northumberland Co.
39312-39313—Gouges, Lot 1, Con. 1, Murray Tp.
39314-39318—Gouges, Lot 1, Con. 1, Ameliasburg Tp.
39319—Gouge, Lot 8, Con. 1, Ameliasburg Tp.
39320—Ice pick, Frankford, Northumberland Co.
39321—Ice pick, Hillier Tp.
39322—Axe or adze, Murray Tp.
39323—Slate pipe, inlaid with lead, North West Territories, Can.
39324—Stone pipe, Lot 21, Con. 3, Hillier Tp.
39325—Stone pipe, Murray Tp.
39326—Stone pipe, Carrying place, Prince Edward Co.
39327—Stone pipe, Ameliasburg Tp.
39328—Stone pipe, Picton.
39329—Unfinished stone pipe, Lot 10, Con. 1, Murray Tp.
39330—Unfinished stone pipe, Hillier Tp.
39331—Stone pipe.
39332—Stone pipe, Frankford, Northumberland Co.
39334—Stone pipe, Stockdale, Northumberland Co.
39335-39337—Fragments of stone pipes, Athol Tp.
39338—Carved slate pipe, Haida Indians, Queen Charlotte Island, B.C.
39339—Catlinite pipe.
39340-39342—Modern Catlinite pipes.
39343—Modern pipe, Arizona, U.S.A.
39344—Modern stone pipe.
39345—Clay pipe, Murray Tp.
39346-39348—Clay pipes, Indian Island Bay of Quinte.
39349-39351—Clay pipes, Picton.
39352-39353—Stems of clay pipes, Picton.
39354—Slate knife, Wellington, Prince Edward Co.
39355-39369—Gorgets, Wellington, Prince Edward Co.
39370—Stone implement, Wellington, Prince Edward Co.
39371-39372—Banner stones, Wellington, Prince Edward Co.
39373—Clay pipe, Wellington, Prince Edward Co.
39374-39380—Fragments of gorgets, Wellington, Prince Edward Co.
39381—String of shell wampum, Waterdown.
39382—Bone beads, Carrying Place.
39383—String of Glass beads, Bald Head.
39384—String of glass and shell beads, Carrying Place.
39385—String of glass and shell beads, Bald Head.
39386—String of glass and shell beads, Sand Banks, P. E. County.
39387—Eight long shell beads, Bald Head.
39388-39390—Strings of shell and glass beads, Indian Island, Bay of Quinte.
39391—String of shell beads, Bald Head.
39392-39393—Strings of shell and glass beads, Picton.

39394-39397—Strings of shell and glass beads, Sugar Point, Prince Edward Co.
39398—String of shell and glass beads, Murray Tp.
39399—String of shell beads, Murray Tp.
39400—String of shell and glass beads, Frankford, Northumberland Co.
39401-39407—Strings of shell and glass beads, Coe Hill, Wollaston Tp.
39408—Small box of shell and glass beads, Wollaston Tp.
39409—Eighty-two chert arrow-heads, etc., Wellers Bay, Prince Edward Co.
39410-39411—Arrow-heads, Wellers Bay, Prince Edward Co.
39412—Fifty-eight arrow-heads, Murray Tp.
39413-39415—Slate arrow-heads, Murray Tp.
39416—Scraper, Murray Tp.
39417—Obsidian arrow-head, Murray Tp.
39418-39426—Arrow-heads, Wellers Bay, Prince Edward Co.
39427—Fifty chert arrow-heads, etc., Wellington.
39428-39437—Arrow-heads, Wellington.
39438—Curved flint implement, Wellington.
39439-39446—Slate arrow-heads, Wellington.
39447—Thirty-three leaf-shaped chert specimens, Bald Head.
39448—Arrow-head (quartz), Bald Head.
39449—Arrow-head (chert), Bald Head.
39450-39451—Arrow-heads (quartz), Indian Island, Prince Edward Co.
39452-39454—Bone awls, Bald Head.
39455-39458—Awls (antler), Bald Head.
39459—Stone pipe, Bald Head.
39460—Clay pipe, Bald Head.
39461—Fragments of bone comb, Bald Head.
39462-39466—Stone axes or adzes, Bald Head.
39467—Scalp Lock.
39468—Glass beads, Carrying Place, Prince Edward Co.
39469—Brass vessel, Bald Head.
39470—Eleven fragments of brass vessels, Bald Head.
39471—Gouge, Carrying Place.
39472—Gorget, Carrying Place.
39473-39474—Axes or adzes, Carrying Place.
39475—Brass vessel, Smokes Point, Prince Edward Co.
39476—Brass vessel, Smokes Point, Prince Edward Co.
39477—Brass vessel, Carrying Place, Prince Edward Co.
39478—Brass vessel, Indian Island, Bay of Quinte.
39479—Seven fragments of brass vessels, Bay of Quinte.
39480-39494—Axes or adzes, Lot 1, Con. 1, Murray Tp.
39495—Glass and bone beads, Lot 1, Con. 1, Murray Tp.
39496—Glass beads, Lot 1, Con. 1, Murray Tp.
39497—Shell gorget, Lot 1, Con. 1, Murray Tp.
39498-39500—Bones (worked), Bald Head.
39501-39505—Horn awls, Bald Head.
39506—Implements made from antler, Bald Head.
39507-39511—Bone awls, Lot 1, Con. 1, Murray Tp.
39512—Beads, Lot 1, Con. 1, Murray Tp.
39513-39515—Fragments of pottery, Lot 1, Con. 1, Murray Tp.
39516—Bone comb, Bald Head.
39517-39519—Barbed bone spear-heads, Bald Head.
39520-39523—Bone pendants, Bald Head.
39524-39526—Bone awls, Bald Head.
39527-39530—Awls (antler), Bald Head.
39531—Clay pipe bowl, Bald Head.
39532—Iron tomahawk, Bald Head.
39533—Thirty chert arrow-heads, Bald Head.
39534—Gorget, Bald Head.
39535-39552—Brass arrow-heads, Bald Head.
39553—Brass bangle, Bald Head.
39554—Piece of sheet copper, Bald Head.
39555-39556—Arrow-heads (sheet brass), Bald Head.
39557-39560—Axes or adzes, Bald Head.
39561—Gouge, Big Island, Bay of Quinte.
39562—Gorget, Bald Head.
39563-39572—Axes or adzes, Big Island, Bay of Quinte.
39573—Axe or adze, Murray Tp.
39574—Gorget, Big Island, Bay of Quinte.
39575-39577—Slate arrow-heads, Big Island, Bay of Quinte.
39578—Part of stone pipe, Big Island, Bay of Quinte.
39579—Rubbing stone, Big Island, Bay of Quinte.

39580—Large chert spear-head, Big Island, Bay of Quinte.
39581-39583—Arrow or spear-heads, Big Island, Bay of Quinte.
39584—Twenty-eight chert arrow-heads, Big Island, Bay of Quinte.
39585-39610—Foot bones (ground flat on one side), Sand Banks, Prince Edward Co.
39611-39650—Bone awls, Sand Banks, Prince Edward Co.
39651—String of bone beads, Sand Banks, Prince Edward Co.
39652-39660—Bone spear-heads (barbed), Sand Banks, Prince Edward Co.
39661-39666—Awls (antlers), Sand Banks, Prince Edward Co.
39667—Forty-three chert arrow-heads, etc., Frankford, Northumberland Co.
39668-39676—Slate arrow or spear-heads, Northumberland Co.
39677-39682—Chert arrow-heads, Northumberland Co.
39683—Thirty chert arrow-heads, Lot 60, Con. 1, Ameliasburg Tp.
39684-39689—Slate arrow or spear-heads, Lot 60, Con. 1, Ameliasburg Tp.
39690-39696—Chert arrow-heads, Lot 60, Con. 1, Ameliasburg Tp.
39697-39700—Bayonets, Queenston Heights.
39701—Iron adze, Queenston Heights.
39702—Forty-two chert specimens, arrows, etc, Ameliasburg Tp.
39703—Fifteen fragments of pottery, Ameliasburg Tp.
39704—Pieces of clay pot, Ameliasburg Tp.
39705-39708—Clay pipe bowls, Ameliasburg Tp.
39709—Gorget, Ameliasburg Tp.
39710-39726—Axes or adzes, Gardenville.
39727—Tablet (sandstone), Gardenville.
39728—One hundred and ten small bone awls, Bald Head.
39729-39732—Bone spear-heads (barbed), Bald Head.
39733-39739—Bone awls, Bald Head.
39740-39744—Imperfect implements (antler), Bald Head.
39745-39754—Bone awls, Lot 21, Con. 3, Hillier Tp.
39755-39757—Foot bones (ground flat), Lot 21, Con. 3, Hillier Tp.
39758-39781—Clay pipe stems, Lot 21, Con. 3, Hillier Tp.
39782-39787—Axes or adzes, Lot 21, Con. 3, Hillier Tp.
39788-39789—Small stone implements, Lot 21, Con. 3, Hillier Tp.
39790—Thirty-five chert specimens, Ameliasburg Tp.
39791-39809—Metal arrow points, Ameliasburg Tp.
39810—Piece of sheet metal, Ameliasburg Tp.
39811-39812—Metal bangles, Ameliasburg Tp.
39813—String of glass beads, Ameliasburg Tp.
39814—String of small shell wampum, Ameliasburg Tp.
39815—String of glass beads, Ameliasburg Tp.
39816—String of shell wampum, Ameliasburg Tp.
39817—String of shell and glass beads, Ameliasburg Tp.
39818—String of shell and glass beads, Ameliasburg Tp.
39819—Small pendant (shell), Ameliasburg Tp.
39820—Small pendant (shell), Ameliasburg Tp.
39821—Clay pipe bowl, Ameliasburg Tp.
39822-39827—Clay pipe stems, Ameliasburg Tp.
39828-39831—Fragments of pottery, Ameliasburg Tp.
39832—Stone pipe bowl, Ameliasburg Tp.
39833-39834—Small stone implement, Ameliasburg Tp.
39835-39842—Arrow-heads, Ameliasburg Tp.
39843—Sixty-five chert specimens, arrows, etc., Sand Banks, Prince Edward Co.
39844—Large flint spear-head, Sand Banks, Prince Edward Co.
39845-39856—Slate arrow or spear-heads, Sand Banks, Prince Edward Co.
39857—Clay pipe bowl, Bald Head.
39858—Silver armlet, Bald Head.
39859-39880—Fragments of pottery, Big Island.
39881—Clay pipe bowl, Big Island.
39882—Clay pipe stem, Big Island.
39883-39895—Axes or adzes, Big Island.
39896—Gorget, Lot 19, Con. 1, Hillier Tp.
39897-39900—Axes or adzes, Carrying Place.
39901—Iron spear-head, Hillier Tp.
39902—Small iron axe-shaped implement, Hillier Tp.
39903-39937—Fragments of pottery, Wellers Bay.
39938—Axe or adze, Gardenville, Ameliasburg Tp.
39939—Axe or adze, Lot 112, Con. 2, Ameliasburg Tp.
39940-39942—Axes or adzes, Lot 112, Con. 2, Ameliasburg Tp.
39943—Axe or adze, Lot 4, Con. 2, Ameliasburg Tp.
39944—Axe or adze, Lot 3, Con. 1, Ameliasburg Tp.
39945—Axe or adze, Lot 107, Con. 3, Ameliasburg Tp.
39946—Axe or adze, Lot 105, Con. 1, Ameliasburg Tp.

39947—Axe or adze, Lot 112, Con. 2, Ameliasburg Tp.
39948—Axe or adze, Lot 106, Con. 1, Ameliasburg Tp.
39949—Axe or adze, Carrying Place.
39950—Sandstone implement, Lot 1, Con. 1, Murray Tp.
39951—Sandstone implement, Lot 17, Con. B, Murray Tp.
39952-39959—Axes or adzes, Lot 10, Con. A, Murray Tp.
39960—Axe or adze, Bald Head.
39961-39962—Axes or adzes, Sand Banks, Prince Edward Co.
39963-39966—Axes or adzes, Granite Island.
39967-39996—Axes or adzes, Hillier Tp.
39997-40000—Axes or adzes, Carrying Place.
40001-40014—Axes or adzes, Bald Head.
40015-40031—Axes or adzes—Smokes Point, Wellers Bay.
40032-40034—Gouge (metal), Carrying Place.
40032-40034—Gouges (metal), Carrying Place.
40037-40050—Axes or adzes, Consecon, Prince Edward Co.
40051—Ice pick, Consecon, Prince Edward Co.
40052-40064—Axes or adzes, Wellington.
40065-40069—Axes or adzes, Lot 9, Con. 1, Murray Tp.
40070-40077—Axes or adzes, Bald Head.
40078—Axe or adze, Picton.
40079—Axe or adze, Hall's Point, Lot 1, Murray Tp.
40080—Axe or adze, Lot 1, Con. 1, Murray Tp.
40081-40082—Axes or adzes, Hillier Tp., Murray Tp.
40083-40090—Axes or adzes, Lot 12, Con. 1, Ameliasburg Tp.
40091-40100—Axes or adzes, Lot 1, Con. 1, Murray Tp.
40101-40109—Axes or adzes, Stony Point, Murray Tp.
40110-40168—Fragments of pottery, Bald Head.
40169-40191—Axes or adzes, Bay of Quinte.
40192-40195—Fragments of pottery, Sand Banks, Prince Edward Co.
40196-40199—Fragments of pottery, Bald Head.
40200—Grooved axe, Dane Co., Wisconsin, U.S.A.
40201—Grooved axe, Murray Tp.
40202—Part of pewter dish, Trenton, Ont.
40203—Sinker (stone), Carrying Place.
40204—Long slender stone implement, Lot 1, Con. 1, Ameliasburg Tp.
40205—Sandstone implement, Lot 1, Con. 1, Ameliasburg Tp.
40206-40208—Sandstone implements, Bald Head.
40209—Long flat stone implement, Lot 1, Con. 1, Ameliasburg Tp.
40210—Axe or adze, Dug Hill, Murray Tp.
40211—Whip handle (antler).
40212-40245—Fragments of pottery, Prince Edward Co.
40246-40266—Axes or adzes, Lot 1, Con. 1, Ameliasburg Tp.
40267-40275—Axes or adzes, Bald Head.
40276-40289—Axes or adzes, Lot 7, Con. 1, Murray Tp.
40290—Axe or adze, Lot 107, Con. 1, Murray Tp.
40291—Axe or adze, Stony Point, Murray Tp.
40292-40298—Axes or adzes, Indian Island.
40299-40304—Axes or adzes, Lot 12, Con. 1, Ameliasburg Tp.
40305—Axe or adze, Lot 1, Con. 1, Ameliasburg Tp.
40306—Axe or adze, Lot 4, Con. 1, Ameliasburg Tp.
40307—Axe or adze, Lot 107, Con. 1, Ameliasburg Tp.
40308-40334—Axes or adzes, Lot 6, Con. 1, Murray Tp.
40335-40349—Axes or adzes, Wellington.
40350—Axe or adze, Northport.
40351—Axe or adze, Bay of Quinte.
40352-40354—Axes or adzes, Wellington.
40355-40364—Axes or adzes, Northport.
40365—Axe or adze, Lot 1, Con. 1, Murray Tp.
40366-40367—Axes or adzes, Lot 107, Con. 3, Ameliasburg Tp
40368-40369—Axes or adzes, Smokes Point.
40370-40380—Axes or adzes, Carrying Place.
40381-40383—Axes or adzes, Athol Tp.
40384—Axe or adze, Trenton, Ont.
40385-40388—Axes or adzes, Gardenville.
40389-40390—Axes or adzes, Lot 85, Con. 2, Ameliasburg Tp.
40391—Axe or adze, Wellington.
40392—Axe or adze, Indian Island, Bay of Quinte.
40393—Axe or adze, Lot 92, Con. 1, Ameliasburg Tp.
40394—Axe or adze, Lot 1, Con. 1, Murray Tp.
40395-40396—Axes or adzes, Gardenville.

40397-40398—Iron tomahawks, Wellington.
40399—Iron tomahawk, Belleville, Ontario.
40400—Iron tomahawk, Carrying Place.
40401—Iron tomahawk, Murray Tp.
40402—Iron tomahawk, Athol Tp.
40403—Metal meat chopper, Wellington.
40404—Broad axe, North Marysburg.
40405—Stone pipe, Athol Tp.
40406—Stone pipe, Wellington.
40407—Stone pipe, Marysburg Tp.
40408—Stone pipe, Lot 5, Con. 5, Murray Tp.
40409-40410—Clay pipe bowls.
40411-40413—Clay pipe bowls, Hillier Tp.
40414-40415—Clay pipe bowls, Wellington.
40416-40430—Clay pipe stems, Bald Head.
40431—Sandstone implement, West Lake.
40432—Sandstone implement, Wellington.
40433-40435—Axes or adzes, Ameliasburg Tp.
40436—Axe or adze, York Road, Trenton.
40437—Axe or adze, Indian Reserve, Georgian Bay, Simcoe Co.
40438—Axe or adze, Hillier Tp.
40439—Twenty-eight fragments of pottery, West Lake.
40440—Twenty-four fragments of pottery, Carrying Place.
40441—Twenty-two fragments of pottery, Athol Tp.
40442—Twenty-eight fragments of pottery, Murray Tp.
40443—Seventeen fragments of pottery, Stony Point, Murray Tp.
40444—Twenty-two fragments of pottery, Kemps, Bay of Quinte.
40445—Eighty-three fragments of pottery, Bald Head.
40446—Forty-six fragments of pottery, Hillier Tp.
40447—Six fragments of pottery, Athol Tp.
40448—Fragments of potttery, Wellington Beach.
40449—Forty fragments of pottery, Lot 10, Con. 1, Murray Tp.
40450—Fifty-two fragments of pottery, Indian Island.
40451—Seventy-one fragments of clay pipes, Indian Island.
40452—Sixty-seven chert specimens, Lot 7, Con. 1, Murray Tp.
40453-40460—Axes or adzes, Lot 7, Con. 1, Murray Tp.
40461-40466—Axes or adzes, Trenton.
40467—Axes or adzes, Hillier Tp.
40468—Slate skinning knife, Hillier Tp.
40469—Eleven fragments of pottery, Trenton.
40470—Twenty-five chert specimens, Trenton.
40471-40472—Slate arrow-heads, Gardenville.
40473-40478—Bone awls, Lot 8, Con. 1, Murray Tp.
40479—Shell gorget, Trenton Mountain.
40480—Part of shell gorget, Trenton Mountain.
40481—Round shell gorget, Trenton Mountain.
40488—Bone gorget, Trenton Mountain.
40489-40492—Brass finger rings, Lot 12, Con. 1, Murray Tp.
40493—Eight brass finger rings, Bald Head.
40494—Twenty-six fragments of brass finger rings, Bald Head.
40495—Nine brass finger rings, Bald Head.
40496—One hundred and forty-one chert specimens, Bloomfield.
40497—Twenty-eight fragments of pottery, Bloomfield.
40498—String of shell wampum, Bloomfield.
40499—String of glass and shell beads, Bloomfield.
40500—String of glass and shell beads, Bloomfield.
40501—Glass and shell beads, Bloomfield.
40502—Steel beads, Wellington.
40503-40508—Slate arrow or spear-heads, Bloomfield.
40509-40510—Bone beads, Bloomfield.
40511-40517—Bone awls, Bloomfield.
40518-40521—Awls (antlers), Bloomfield.
40522—Fragments of skull (human), Bloomfield
40523-40526—Fragments of sheet brass, Bloomfield.
40527-40531—Old metal knife blades, Bloomfield.
40532—Stone tube, Bloomfield.
40533-40539—Arrow-heads, Bloomfield.
40540-40541—Axes or adzes, Bloomfield.
40542—Ice pick, Frankford.
40543-40544—Axes or adzes Frankford.
40545-40549—Axes or adzes, Lot 12, Con. 1, Murray Tp.

40550-40553—Axes or adzes, Wellington.
40554—Axe or adze, Gardenville.
40555—Axe or adze, Ameliasburg Tp.
40556-40557—Axes or adzes, Trenton, Ont.
40558—Rubbing stone, Indian Island.
40559-40564—Axes or adzes, Bald Head.
40565——Axe or adze, Ameliasburg Tp.
40566—Eight chert specimens, Lot 6, Con. 1, Murray Tp.
40567—Skinning knife (slate), Lot 6, Con. 1, Murray Tp.
40568-40577—Axes or adzes, Lot 6, Con. 1, Murray Tp.
40578—Fragment of pottery, Lot 7, Con. 1, Murray Tp.
40579-40580—Fragments of pottery, Lot 9, Con. 1, Murray Tp.
40581—Clay pipe, Lot 107, Con. 1, Murray Tp.
40582—Stone pipe, Lot 1, Con. 1, Murray Tp.
40583—Gorget, Bald Head.
40584—One hundred and thirty chert specimens, Lot 7, Con. 1, Murray Tp.
40585—Seventy-one chert specimens, Lot 99, Con. 2, Ameliasburg Tp.
40586—Iron tomahawk, Smokes Point, Wellers Bay.
40587-40590—Axes or adzes, Smokes Point, Wellers Bay.
40591—Awl (antler), Smokes Point, Wellers Bay.
40592-40593—Bone combs, Smokes Point, Wellers Bay.
40594—Small shell gorget, Smokes Point, Wellers Bay.
40595-40597—Arrow-heads, Smokes Point, Wellers Bay.
40598-40608—Clay tablets, Michigan State, U.S.A.
40609—Copper knife, Michigan State, U.S.A.
40610-40611—Copper tablets, Michigan State, U.S.A.
40612-40616—Copper spear-heads, Michigan State, U.S.A.
40617-40618—Copper arrow-heads, Michigan State, U.S.A.
40619-40625—Copper discs, Michigan State, U.S.A.
40626-40628—Copper ornaments, Michigan State, U.S.A.
40629-40630—Copper head ornaments, Michigan State, U.S.A.
40631-40633—Copper ornaments, Michigan State, U.S.A.
40634-40635—Large slate implements, Michigan State, U.S.A.
40636-40637—Ceremonial stones, Michigan State, U.S.A.
40638-40649—Sandstone gorgets, Michigan State, U.S.A.
40650—Clay casket with lid, Michigan State, U.S.A.
40651—Clay casket with lid, Michigan State,, U.S.A.
40652—Clay casket with lid, Michigan State, U.S.A.
40653—Clay casket with lid, Michigan State, U.S.A.
40654—Lid of clay casket, Michigan State, U.S.A.
40655-40659—Clay pipes, Michigan State, U.S.A.
40660-40668—Clay vessels, Michigan State, U.S.A.
40669—Forty chert specimens, Michigan State, U.S.A.
40670—Slate spear-head, Michigan State, U.S.A.
40671-40680—Clay vessels, Arizona, U.S.A.
40681-40682—Clay vessels (black), Arizona, U.S.A.
40683-40684—Gorgets, Hillier Tp.
40685—Stone pipe, North West Territories.
40686—Stone pipe, Murray Tp.
40687—Stone pipe, Prince Edward Co.
40688—Stone pipe, Trenton.
40689-40690—Casts of stone pipes.
40691-40693—Clay pipes, Hillier Tp.
40694—Iron tomahawk, Hillier Tp.
40695—Gouge, Hillier Tp.
40696-40700—Axes or adzes, Con. 1, Hillier Tp.
40701-40702—Axes or adzes, Wellington.
40703-40706—Axes or adzes, Hillier Tp.
40707—Axe or adze, Con. 1, Ameliasburg Tp.
40708—Clay pipe, Con. 1, Ameliasburg Tp.
40709—Old Indian-made wooden pipe, North West Territories.
40710—Catlinite pipe with stem, North West Territories.
40711—Small shell ornament, Hillier Tp.
40712—Glass and shell beads, Hillier Tp.
40713—Eleven fragments of clay vessel, Hillier Tp.
40714—Eight fragments of clay vessel, Hillier Tp.
40715—Rim of clay vessel, Sand Banks, Wellington.
40716—Fragments of clay pottery, Hillier Tp.
40717—Clay vessel (broken), Sand Banks, Wellington.
40718-40722—Grooved axes, Arkansas, U.S.A.
40723-40724—Axes or adzes (notched), Arkansas, U.S.A..

40725—Boat amulet, Arkansas, U.S.A.
40726-40727—Axes or adzes, Arkansas, U.S.A.
40728—Clay pot, Yell Co., Arkansas, U.S.A.
40729—Clay pot, Arkansas, U.S.A.
40730—Clay pot, Arkansas, U.S.A.
40731—Clay disc, Arizona, U.S.A.
40732—Clay pot, Arkansas, U.S.A.
40733-40734—Clay pots, Yell Co., Arkansas, U.S.A.
40735-40736—Clay pots, Pope Co., Arkansas, U.S.A.
40737—Clay vessel, Yell Co., Arkansas, U.S.A.
40738—Clay vessel, Tennessee, U.S.A.
40739-40740—Clay pots, Arkansas, U.S.A.
40741-40742—Clay pots, Arkansas, U.S.A.
40743—Large clay vessel, Yell Co., Arkansas, U.S.A.
40744—Flat clay vessel, Clarke Co., Arkansas, U.S.A.
40745—Clay vessel, Yell Co., Arkansas, U.S.A.
40746—Five hundred and fifty arrow heads, Arkansas, U.S.A.
40747—Buckskin Indian shirt, Yellowstone Co., California, U.S.A.
40748—Indian-made beaded cap, Quebec.
40749—Beaded leg band, North West Territories.
40750—Buckskin tobacco bag (quill work), North West Territories.
40751—Buckskin tobacco bag (beaded), North West Territories.
40752—Pair beaded moccasins, North West Territories.
40753—Pair beaded mitts, North West Territories.
40754—War club (mounted), North West Territories.
40755—War club (carved wood), North West Territories.
40756—Bow.
40757—Quiver and arrows, North West Territories.
40758—Birch bark bucket, Ontario.
40759-40760—Stone axes—mounted (modern).
40761—Spear, Philippine Islands.
40762—Leather scabbard, Manila.
40763—Papoose carrier, Quebec.
40764—Soldier's leather harness for packing goods, S. Africa.
40765-40767—Skulls, Bald head.
40768—Skull, Lot 10, Con. 1, Murray Tp.
40769—Skull, Bald Head.
40770—Skull, with arrow-head included, Bald Head.
40771-40780—Skulls, Bald Head.
40781-40785—Fragments of skulls, Bald Head.
40786—Skull, Bald Head.
40787—Broken skull, Bald Head.
40788-40789—Femur bones, Bald Head.
40790—Stone hammer, Murray Tp.
40791-40794—Axes or adzes, Bald Head.
40795—Ceremonial stone.
40796-40808—Gorgets, Lot 19, Con. 1, Hillier Tp.
40809—Small slate implement, Hillier Tp.
40810-40813—Slate knives, Lot 19, Con. 1, Hillier Tp.
40814—Eighty chert specimens, Lot 19, Con. 1, Hillier Tp.
40815—Large copper implement (with native silver), Buchanan's Farm, Murray Tp
40816—Copper chisel, Bald Head.
40817—Copper chisel, Lot 20, Con. 4, Murray Tp.
40818—Copper chisel, Carrying Place.
40819—Copper spear-head, Carrying Place.
40820-40821—Copper spear-heads, Lot 20, Con. 4, Murray Tp.
40822—Copper spear-head, Picton, Athol Tp.
40823—Copper spear-head, Sand Banks, Prince Edward Co.
40824—Copper spear head, Lot 20, Con. 4, Murray Tp.
40825—Copper spear-head, Indian Island, Bay of Quinte.
40826—Copper spear-head, Carrying Place.
40827—Copper spear-head, Lot 20, Con. 4, Murray Tp.
40828—Copper knife, Indian Island, Bay of Quinte.
40829—Copper spear or arrow-head, Hillier Tp.
40830—Copper spike, Indian Island, Bay of Quinte.
40831—Copper spike, Lot 20, Con. 4, Murray Tp.
40832—Copper spike, Sand Banks, Prince Edward Co.
40833—Copper bracelet, Indian Island, Bay of Quinte.
40834—Copper bracelet, Sand Banks, Prince Edward Co.
40835—Copper lug off a vessel, Indian Island, Bay of Quinte.
40836-40837—Copper lugs off a vessel, Carrying Place.

40838-40839—Copper lugs off a vessel, Hillier Tp.
40840-40841—Copper lugs off a vessel, Murray Tp.
40842-40844—Copper lugs off a vessel, Picton.
40845—Brass finger ring Picton.
40846-40849—Pieces of sheet copper, Carrying Place.
40850—Copper knife handle, Carrying Place.
40851—String of copper beads, Carrying Place.
40852—String of copper beads (made of sheet copper), Carrying Place.
40853—Stirrup-shaped copper implement, Carrying Place.
40854-40855—Copper ferrule, Carrying Place.
40856-40882—Arrow-heads—sheet copper, Bald Head.
40883-40892—Arrow-heads (made of sheet copper), Indian Island.
40893—Six arrow-heads (sheet copper), Murray Tp
40894—Nine fragments of sheet copper, Murray Tp.
40895-40900—Bangles made from sheet copper, Murray Tp.

PRESENTED BY ARCHIBALD McKENZIE, GUELPH, ONT.

40901—Unfinished pipe (stone), Goochland Co. Virginia, U.S.A.
40902—Pestle, Fraser Delta, B.C.
40903—Axe or adze, 10th Con., Puslinch Tp., Ont.
40904—Axe or adze, 10th Con., Puslinch Tp. Ont.
40905—Gouge, 10th Con., Puslinch Tp., Ont.
40906—Axe or adze, 10th Con., Puslinch Tp., Ont.
40907—Axe or adze, East Indian Trail, Puslinch, Ont.
40908—Ice pick, East Indian Trail, Puslinch, Ont.
40909—Grooved axe, Goochland Co., Virginia, U.S.A.
40910—Grooved axe, 10th Con., Puslinch Tp., Ont.
40911—Gouge, 10th Con. (south), Puslinch Tp.
40912—Axe or adze, 10th Con., Puslinch Tp.
40913—Discoidal stone, Pt. Roberts, B.C.
40914-40915—Axes or adzes, 10th Con., Puslinch Tp.
40916—Axe or adze, Lot 17, Con. 10, Puslinch Tp.
40917—Axe or adze, 10th Con., Puslinch Tp.
40918—Rubbing stone, Yellowstone Park, U.S.A.
40919-40920—Axes or adzes, 10th Con. Puslinch Tp.
40921—Flint-lock pistol, Arkell village, on farm of Thos Arkell.
40922—Horn spoon (used for potlatch occasions) Skeena River, B.C.
40923—Japanese pipe, Vancouver, B.C.
40924—Porcupine quill, Australia.
40925—Chinese pipe, Vancouver, B.C.
40926—Rattle snake rattles, California, U.S.A.
40927—Brass bracelet, South Africa.
40928-40929—Quartz spear-heads, Parry Sound.
40930-40931—Arrow or spear-heads, East Flamboro.
40932-40933—Arrow or spear-heads, East Flamboro.
40934—Copper spear-head, Puslinch Tp.
40935—Chert spear-head, Nebraska, U.S.A.
40936-40937—Iron arrow or spear-heads, Nebraska, U.S.A.
40938—Arrow-head (chert), East Flamboro.
40939—Arrow-head (chert), East Indian Trail, Puslinch.
40940-40941—Arrow-heads (chert), East Indian Trail, Puslinch.
40942—Iron spear-head, Indian camping ground, Halton Co.
40943-40944—Gorgets, East Indian Trail, Puslinch.
40945—Carved human head (soapstone), Nassagaweya, Ont.
40946—Pendant (fossil), East Indian Trail, Puslinch.
40947—Gorget, Lot 17, Con. 10, Puslinch.
40948—Gorget, East Trail, Flamboro.
40949—Catlinite pipe, near Portage la Prairie, Man.
40950—Stone pipe, West Trail, Puslinch.
40951—Clay pipe (modern), Parry Sound, Ont.
40952-40956—Spear-heads (chert), 10th Con., Puslinch Tp.
40957—Spear-head, East Trail, Flamboro.
40958—Spear-head.
40959-40962—Spear-heads, East Trail, East Flamboro.
40963—Drill (chert), East Trail, East Flamboro.
40964-40968—Arrow-heads, Con. 10, Puslinch Tp.
40969—Spear-head, Con. 10, Puslinch Tp.
40970-40976—Arrow-heads, Con. 10, Puslinch Tp.
40977-40980—Arrow-heads, Con. 10, Puslinch Tp.
40981-40982—Arrow-heads, Lot 17, Con. 10, Puslinch.

40983-40986—Spear-heads (chert), East Trail, Puslinch.
40987—Leaf-shaped implement, East Trail, E. Flamboro.
40988—Large leaf-shaped implement (white quartz), Parry Sound.
40989—Arrow or spear-head, Yellowstone Park, U.S.A.
40990—Curved flint implement, Yellowstone Park, U.S.A.
40991-40993—Chert specimens, East Trail, Puslinch.
40994—Chert knife, Lot 14, Con. 10, Puslinch Tp (on the farm of Hector Gilchrist).
40995—Spear-head (chert), Con. 10, Puslinch Tp.
40996—Chert implement, East Trail, E. Flamboro.
40997-41001—Chert implements, Lot 17, Con. 10, Puslinch Tp.
41002—Drill (chert), Lot 17, Con. 10, Puslinch Tp.
41003-41015—Arrow-heads, Lot 17, Con. 10, Puslinch Tp.
41016-41037—Arrow-heads, East Trail, Puslinch Tp.
41038-41072—Arrow-heads, etc., Puslinch Tp.
41073—Arrow-head, Lot 18, Con. 10, Puslinch Tp.
41074-41078—Arrow-heads, East Trail, Puslinch Tp.
41079-41082—Arrow-heads, East Flamboro.
41083-41084—Arrow-heads.
41085-41086—Arrow-heads, Con. 10, Puslinch Tp.
41087—Arrow-head (obsidian), Yellowstone Park, U.S.A.
41088-41089—Arrow-heads, Puslinch.
41090—Arrow-head, Nassagaweya, Ont.
41091-41092—Arrow-heads, Nassagaweya, Ont.
41093-41095—Arrow-heads, Puslinch.
41096-41097—Arrow-heads, Parry Sound.
41098-41099—Arrow-heads, Puslinch.
41100—Arrow-head, Parry Sound.
41101-41102—Arrow-heads, Nassagaweya.
41103—Bear tooth, Nassagaweya.
41104-41165—Arrow-heads, Richmond, Virginia, U.S.A.
41166-41212—Arrow-heads and scrapers (chert, jasper, obsidian), Yellowstone Park, U.S.A.
41213—Drill, Yellowstone Park, U.S.A.
41214-41240—Arrow-heads (chert and obsidian), Yellowstone Park, U.S.A.
41241-41242—Copper rings, Nassagaweya.
41243—Crescent shaped piece of limestone, Yellowstone Park, U.S.A.
41244—Chert drill, East Trail, Puslinch.
41245—Spear-head, Puslinch.
41246-41248—Arrow-heads (quartz), Puslinch.
41249-41250—Arrow-heads (chert), Puslinch.
41251-41252—Arrow-heads (quartz), Puslinch.
41253-41258—Arrow-heads, Puslinch.
41259—Arrow-head, Puslinch.
41260-41262—Arrow-heads, Puslinch.
41263—Arrow-head (quartz), Puslinch.
41264-41267—Arrow-heads, Puslinch.
41268—Arrow or spear-head, East Flamboro.
41269—Drill (chert), Beverly Tp.
41270-41277—Arrow-heads (chert) East Flamboro.
41278—Arrow-head (chert), Puslinch.
41279—Arrow-head (chert), Puslinch.
41280-41283—Arrow-heads, East Flamboro.
41284-41285—Drills, Puslinch.
41286-41312—Arrow-heads (chert), Puslinch.
41313—Wampum beads and buttons, near Vancouver, B.C.
41314—Bone bead, Camping ground, East Trail, Puslinch.
41315—Catlinite bead, Camping ground, East Trail, Puslinch.
41316—Bone awl, Camping ground, East Trail, Puslinch.
41317-41320—Bone beads, Camping ground, East Trail, Puslinch.
41321-41324—Bone awls, Camping ground, East Trail, Puslinch.
41325—Bird amulet, Camping ground, East Trail, Puslinch.
41326-41330—Bone awls, Camping ground, East Trail, Puslinch.
41331—Chert implement, Puslinch.
41332—Water-worn stone (pestle shaped), Yellowstone Park, U.S.A.
41333—Axe or adze, East Trail, Puslinch.
41334—Candle snuffer, East Flamboro.
41335—Fragment of circular stone, Goochland Co., Virginia, U.S.A.
41336—Chinese pipe, Skeena River, B.C.
41337—Well finished cruse (wick lamp), Donegal, Ireland.
41338—Round piece of soapstone (hollowed out), Yellowstone Park, U.S.A.
41339—Pottery fragment, Dumfries Tp.

41340—Iron tomahawk, Dumfries Tp.
41341—Iron adze, Parry Sound.
41342—Fragment of stone pillar, Dunfermline Castle, Scotland.
41343—Mortar, Fraser Delta, B.C.
41344—Mortar, Sacramento Valley, California, U.S.A.
41345—Anchor Stone, Fraser Delta, B.C.
41346—Hammer stone, Rokeby, Sask.
41347—Long pestle-shaped stone, Sacramento Valley, California, U.S.A.
41348—Stone anchor, Fraser Delta, B.C.
41349—Stone sinker, Fraser Delta, B.C.
41350—Hammer stone, near Portage la Prairie, Man.
41351-41352—Horn spoons, Iceland.
41353-41360—Horn spoons, Skeena River, B.C.
41361—Chisel (stone), Puslinch township.
41362-41363—Water-washed stone (with hole), Skeena River, B.C.
41364—Halibut fish hook, Port Simpson, B.C.
41365—Salmon fish-hook, Skeena River, B.C.
41366—Chinese hat, Vancouver, B.C.
41367-41368—Bayonets (American war).
41369—Short sword, found near Sterling, Scotland.
41370—Beaded moccasins, Dakota.

PRESENTED BY MRS. HECTOR CLEMES.

41371—Toggle spear point and raw hide lash, James Bay.
41372—Long woven wool sash, James Bay.
41373—Buckskin mitts, James Bay.
41374—Buckskin mitts, James Bay.

UNIVERSITY OF TORONTO

REPORT OF THE

BOARD OF GOVERNORS

FOR THE

YEAR ENDING 30th JUNE

1921

PRINTED BY ORDER OF
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REPORT OF THE

BOARD OF GOVERNORS

For the year ending 30th June, 1921

To His Honour the Lieutenant-Governor in Council:

The Governors of the University of Toronto have the honour to submit their fifteenth annual report, with which is included the President's report upon the academic work of the University and its Colleges for the Session 1920-21, and the usual departmental reports. There are also appended the customary statements in detail of the receipts and expenditures of the Board for the fiscal year which closed on 30th June, 1921, duly audited in accordance with the provisions of the Statute.

The erection of the new building for Electrical Engineering was practically completed during the year, there having been expended thereon at 30th June $324,398 out of the grant of $350,000 voted by the Legislature for the purpose. Certain fittings and equipment remained to be provided from the balance of the appropriation, but the building was ready for occupation by the opening of the current Session, and the formal opening took place early in the term.

During the year, also, the plans and specifications for the new Anatomical building, for the erection of which a grant of $500,000 has been passed by the Legislature, were considered and revised and tenders let for the work. The construction was begun in the summer and the building is now considerably advanced. It is hoped to have it ready for use in the Session 1922-23.

Plans for the additions to the Ontario College of Education are now under consideration by a Committee of the Board and officials of the Department of Education.

The gross revenue for the year was $1,082,867. The deduction of interest written to Scholarship and other Trust Funds, $12,286, and of interest paid for bank accommodation, etc., $1,535, left a net revenue of $1,069,046, as against $1,055,825 in 1919-20.

The expenditure under the appropriations for salaries and maintenance was $1,937,516. This figure, while exceeding that of the previous year by $428,205, is less by $57,422 than the anticipated expenditure shown by the estimates prepared at the beginning of the year, and is an evidence, therefore, of the rigid oversight and economy that has been exercised. The item of salaries amounted to $227,325 more than in 1919-20, and that of Special Research to some $13,000 additional. The Central Heat, Light and Power Plant cost $73,197 more than in the previous year, due to the high cost of fuel and labour, and also to an expenditure of some $10,000 upon pipe covering, soot blowers and other special alterations within the plant designed to give greater efficiency and economy of operation. In the Faculty of Applied Science $15,000 had to be spent upon structural changes in the old Engineering building, and in a number of depart-

ments in that Faculty increased expenditures had to be made for alterations, fitting up of additional rooms, etc., e.g., in Metallurgy $7,246, and Applied Chemistry $2,750. In Electro-Chemistry the installation of electric furnaces cost $9,163. In Electrical Engineering, distribution panels in laboratories and equipment for lecture rooms which could not be provided from the capital account for the building cost a further $8,800. The general cost of examinations was greater by $5,600. The completion of the Roll of Service represents an increased outlay of upwards of $5,000. The University's share of the maintenance of the Royal Ontario Museum was greater by almost $12,500; while the expansion in the work of the department of University Extension and Publicity accounts for an increase of a further $8,000. Other items of smaller importance make up the total.

The difference between the available revenue $1,069,046, and the expenditure $1,937,516, is $868,470. To this had to be added the debit balance brought forward from the previous year $9,311, making $877,781. This has been charged against the special grant of $880,000 voted by the Legislative Assembly for 1920-21, leaving a balance on hand of $2,219.

All of which is respectfully submitted.

B. E. Walker,
Chairman.

Toronto, 30th November, 1921.

PRESIDENT'S REPORT

1921-1922

To the Governors of the University of Toronto:

GENTLEMEN,—I beg to submit the following report on the academic work of the University and University College during the twelve months ended June 30th, 1921.

The total staff of the University and University College numbered 558, of whom 68 were professors, 48 associate-professors, 41 assistant-professors, 76 lecturers and associates (in medicine) and instructors in the College of Education, 325 demonstrators, fellows and instructors with sessional appointments. They were distributed as follows:—

	Professors.	Associate Professors	Assistant Professors	Associates	e	Other Sessional Appointments
University (Faculty of Arts)	26*	14	17	.....	21	75
University College	13	4	9	.....	6	6
Faculty of Medicine	15	17	4	11	1	156
Faculty of Applied Science	10	9	4	.....	13	43
Faculty of Household Science	.....	2	.....	.....	2	5
Faculty of Forestry	1	2	.....	.....	.....	.....
Faculty of Music	.....	.....	.....	.....	4	.....

*1 also in Med.

	Direc-tor.		Director Field Work			
Social Service Courses	1	.....	1	.....	.....	13
Public Health Nursing	1	.....	1	.....	.....	24

				Lecturers and Chief Instructors	Assistant Instructors	
Ontario College of Education	3	.....	7	4	14	.....

In Victoria College there were:

Professors	14
Associate Professors	4
Lecturers	6
Special Instructor	1

In Trinity College there were:

Professors	9
Lecturers	8

In St. Michael's College there were:

Professors	0
Lecturers	17

Dr. Irving H. Cameron having reached the age limit for retirement withdrew from the active duties of the professorship of Surgery which he had performed for thirty-three years. By his skill and knowledge as a surgeon, his broad and deep cultivation of mind, his exemplification of the best qualities of his profession and his wide acquaintance with its leaders in both hemispheres he shed great lustre on the chair which he occupied. The University is deeply grateful for the service rendered to her by one of her most loyal sons.

At the close of the session William George Smith, B.A., Associate-Professor of Psychology resigned his position in order to become head of the department of Philosophy in Wesley College, Winnipeg.

The following new appointments and promotions were made during the year:—

In the Faculty of Arts.—Promotions: Thomas Hirst Black, M.A., B.Sc., LL.B., (Glasgow), from a lectureship to a professorship in Roman Law and Jurisprudence; Samuel Beatty, Ph.D., from an assistant-professorship to an associate-professorship in Mathematics; Hardolph Wasteneys, Ph.D., (Columbia), from an assistant-professorship to an associate-professorship in Biochemistry; Edward Alexander Bott, B.A., from a lectureship to an assistant-professorship in Psychology; David Duff, M.A., B.D., (Edin.), from a lectureship to an assistant-professorship in Latin.

Appointments—Ralph Flenley, M.A., (Liverpool), B.Litt., (Oxon), associate-professor of History; Robert Strachan Knox, B.A. (Oxon), M.A. (Aberdeen), associate-professor of English; Emilio Goggio, M.A., Ph.D. (Harvard), assistant professor of Italian and Spanish; Thure Hedman, Ph.B. (Chicago), assistant-professor of German; James Montrose Duncan Olmsted, M.A. (Oxon), Ph.D. (Harvard), assistant-professor of Physiology; John Lighton Synge, B.A. (Trin. Coll. Dublin), assistant-professor of Mathematics; Miss Aline Chalufour, B. ès L. (Paris), lecturer in French; William Andrew Cook, M.A., lecturer in Psychology; John Richardson Dymond, M.A., lecturer in Systematic Vertebrate Zoology; Wellesley Dorland Evans, B.A., lecturer in French; Harold William Alexander Foster, LL.B., lecturer in Commercial and International Law; Harold Adams Innes, M.A., (Chicago), lecturer in Political Economy; Hubert Richmond Kemp, M.A., lecturer in Economics; Norris Edward Sheppard, M.A., lecturer in Mechanics and Mathematics; Norman Burke Taylor, M.B., lecturer in Physiology, and Miss Jessie Gertrude Wright, M.A., lecturer in Botany.

In the Faculty of Medicine.—Promotions: Robert Davies Defries, M.D., D.P.H., from a lectureship to an assistant-professorship in Hygiene; Hugh Bethune Maitland, M.B., from a lectureship to an assistant-professorship in Pathology and Bacteriology.

Appointments—Alexander Primrose, C.B., M.B., C.M. (Edin.), Dean; John James Rickard Macleod, M.B., C.B. (Aberdeen), D.P.H. (Cambridge), Associate-Dean; Victor John Harding, D.Sc. (Manchester), professor of Chemical pathology; Gideon Silverthorne, M.B., professor of Medical Jurisprudence; Noble Carman Sharpe, B.A., M.B., assistant professor of Pharmacy and Pharmacology; George Maitland Biggs, M.B., associate in Oto-Laryngology ; Harvey Clare, M.D., associate in Psychiatry; Gordon Earle Richards, M.B., associate in Radiology; and Donald Thomas Fraser, B.A., M.B., lecturer in Hygiene.

In the Faculty of Applied Science,—Promotions: Peter Gillespie, M.Sc., C.E., from an associate-professorship to a professorship in Applied Mechanics; Frederick Charles Dyer, B.A.Sc., from a lectureship to an assistant-professorship in Mining Engineering.

Appointments—Adrian Berrington, associate-professor of Architecture; John Hamilton Parkin, B.A.Sc., M.E., assistant-professor of Hydraulics; C. S. Adams, B.Sc., M.A., lecturer in Applied Chemistry; Wesley Austin, M.Sc., lecturer in Metallurgical Engineering; and James Edwin Toomer, B.Sc., lecturer in Metallurgical Engineering:

In the Faculty of Forestry,—Promotions: Clifton Durant Howe, M.A. (Vermont), Ph.D. (Chicago), from associate-professorship and acting deanship to a professorship and to be Dean of the Faculty; Willis Norman Millar, B.Sc. (Pennsylvania), M.F. (Yale), from an assistant-professorship to an associate-professorship; James Herbert White, M.A., B.Sc.F., Ph.D., from an assistant-professorship to an associate-professorship.

In the Department of Social Service.—Appointments: James Alfred Dale, M.A., (Oxon), Director of Department and professor of Social Science; Miss Agnes Christine McGregor, Director of Field Work.

In the Department of Public Health Nursing.—Appointments: Miss E. Kathleen Russell, B.A., Director of Course.

In the Department of Public Health Nursing,—Appointments: Miss E. Dunlop, B.A. (Queen's), Director of Extension Work and Publicity.

In the Department of Military Studies.—Appointments: Professor William Robert Lang, D.Sc. (Glasgow), Director of Military Studies.

In the Ontario College of Education,—Promotions: Peter Sandiford, M.Sc., Ph. D., from an associate-professorship to a professorship in Educational Psychology; Miss Laura Lavinia Ockley, B. A., from a lectureship to an assistant-professorship in Household Science.

Appointments,—Walter Ernest Macpherson, B.A., LL.B., assistant-professor: Frank Halbus, B.A., lecturer, and Allen Nelson Scarrow, lecturer.

In Special Research,—Appointments; John Bright Ferguson, B.A., associate-professor of Chemistry; Harold Boys Sifton, M.A., assistant-professor of Botany.

The total number of students registered in the University in 1920-1921 was 5,060, or apart from those registered in the Summer Session and Occasionals in Social Service, 4,710, distributed as follows:—

	Men.	Women.	Total.
Faculty of Arts:—			
University of Toronto	128	61	189
University College	630	540	1,170
Victoria College	319	191	510
Trinity College	88	41	129
St. Michael's College	121	85	205
Graduate Courses	113	50	163
Faculty of Medicine	1,039	88	1,127
Faculty of Applied Science	805	1	806
Ontario College of Education	150	76	226
Faculty of Forestry	55	....	55
Faculty of Music	12	6	18
Department of Social Service	18	348	366
Department of Public Health Nursing		126	126
Registered twice	20	11	31
	3,458	1,602	5,060

The figures may be further analyzed as follows:

FACULTY OF ARTS.

University of Toronto.

	Men.	Wowen.	Total.
Teachers' Courses and Summer Session	52	44	96
Occasional Arts Students	19	17	36
Veterinary Students	57	....	57
	128	61	189

University College.

	Men.	Women.	Total.
First Year Undergraduates	264	193	457
Second Year Undergraduates	162	131	293
Third Year Undergraduates	102	87	189
Fourth Year Undergraduates	71	97	168
Occasional Students	31	32	63
	630	540	1,170

Victoria College.

	Men.	Women.	Total.
First Year Undergraduates	92	86	178
Second Year Undergraduates	64	72	136
Third Year Undergraduates	52	29	81
Fourth Year Undergraduates	51	37	88
Occasional Students	23	4	27
	319	191	510

Trinity College

	Men.	Women.	Total.
First Year Undergraduates	22	20	44
Second Year Undergraduates	27	15	42
Third Year Undergraduates	17	10	27
Fourth Year Undergraduates	8	6	14
	88	41	129

St. Michael's College.

	Men.	Women.	Total.
First Year Undergraduates	48	36	84
Second Year Undergraduates	28	18	46
Third Year Uudergraduates	17	19	36
Fourth Year Undergraduates	14	10	24
Occasional Students	14	2	16
	121	85	206

Graduate Courses.

	Men.	Women.	Total.
Candidates for Ph.D.	28	6	34
Candidates for M.A.	62	33	95
Candidates for M.D.	3	....	3
Graduate Students	20	11	31
	113	50	163

Faculty of Medicine.

	Men.	Women.	Total.
First year Undergraduates	197	11	208
Second Year Undergraduates (Five Years Course)	196	16	212
Second Year Undergraduates (Six Years Course)	133	15	148

Third Year Undergraduates	214	19	233
Fourth Year Undergraduates	160	14	174
Fifth Year Undergraduates	119	12	131
Post Graduate Students	6	1	7
Occasional Students	3	....	3
Candidates for D.P.H.	10	1	11
	1,038	89	1,127

Faculty of Applied Science.

	Men.	Women.	Total.
First Year Undergraduates	192	....	192
Second Year Undergraduates	315	1	316
Third Year Undergraduates	162	....	162
Fourth Year Undergraduates	135	....	135
Occasional Student	1	....	1
	805	1	806

Ontario College of Education.

	Men.	Women.	Total.
Students registered	150	76	226

Faculty of Forestry.

	Men.	Women.	Total.
First Year Undergraduates	19	....	19
Second Year Undergraduates	18	....	18
Third Year Undergraduates	10	....	10
Fourth Year Undergraduates	5	....	5
Sixth Year Undergraduates	1	....	1
Occasional and Special Students	2	....	2
	55	....	55

Faculty of Music.

	Men.	Women.	Total.
First Year Undergraduates	6	4	10
Second Year Undergraduates	3	....	3
Third Year Undergraduates	3	1	4
Occasional Student	....	1	1
	12	6	18

Department of Social Service.

	Men.	Women.	Total.
Students registered	18	348	366

Department of Public Health Nursing.

	Men.	Women.	Total.
Full time Students	....	50	50
Part time Students	....	76	76
	....	126	126

The numbers examined in the different departments of the University, including those granted standing for Military Service, were as follows:—

Arts:	
Ph.D.	4
M.A.	55
Fourth Year	319
Third Year	469

Second Year	656	
First Year	750	
Senior Matriculation	204	
		2,357
Medicine:		
Fifth Year	131	
Fourth Year	169	
Third Year	232	
Second Year	321	
First Year	195	
Occasional Student	1	
		1,049
Applied Science:		
Professional Degrees	4	
Fourth Year	131	
Third Year	161	
Second Year	295	
First Year	181	
		772
Education		161
Forestry		54
Music		7
Law		22
Pharmacy		99
Dentistry		1,075
Agriculture		83
Local Examination in Music		613
Veterinary Science		20
Social Service		277
Public Health Nursing		50
The degrees conferred were:		
LL.D. (Honorary)	8	
D.Litt. (Honorary)	2	
D.Sc. (Honorary)	2	
Ph.D.	3	
M.A.	52	
M.A.Sc.	1	
D.V.Sc.	1	
LL.B.	4	
M.D.	2	
D.P.H.	2	
M.B.	143	
B.A.	332	
C.E.	2	
M.E.	1	
B.A.Sc.	118	
D.D.S.	140	
B.S.A.	74	
B.Sc.F.	6	
Phm.B.	94	
B.V.Sc.	19	
		1,006

Such a complete report of the present condition and needs of the University was presented last December to the University Commission appointed by the Government, that little remains except to refer to the actual work of the academic year and to emphasise a few matters of especial urgency.

The figures of attendance show that in all the faculties and departments except the College of Education there have been more students than in any other year in the history of the University. Arts has reached its pre-war mark; Medicine is much higher than it has ever been; Applied Science, in spite of the

exaction of a more difficult standard of entrance, was as large as in the previous year. Owing to pressure on our space the students of the Royal College of Dental Surgeons could not be given instruction in Anatomy, and to that extent the number of occasionals was diminished.

The problem of entrance still faces us. The first year of University College was so large that the accommodation was not only quite inadequate, but is such that there are many rooms in which students should not be required to take instruction. The situation in Economics was even worse, for one old dwelling-house was the headquarters of a department that has to provide instruction for 763 pass and 240 honour students. But perhaps worst of all was the condition of the students in Botany. Not only are the laboratories of this rapidly growing department quite inadequate for the present, but it was necessary to break up the teaching museum in order to get space for the routine instruction. Graduate work is curtailed, and necessary additions to the staff cannot be secured to take care even of present needs as there is no place in which to have the teaching done. It will be difficult to attract good men to the staff until better quarters can be offered.

I cannot emphasise too strongly the fact that the delay in carrying out the building programme set forth by the Governors last year to the Commission is seriously crippling the efficiency of the University. Every indication goes to show that even with the rise of standards the numbers in Arts will not be reduced in such a way as to make the demands for buildings less urgent. The best work cannot be done in the kind of space we have at our disposal..

The Faculty of Arts is maintaining its position among the other Faculties, and shows signs of steady and permanent increase, which is partly due to the large number of women who are entering the Colleges. This fact increases the necessity of securing a Dean of Women who will have as her main duty the supervision of the welfare of the women students in University College. For the last five years Miss Margaret Wrong acted as Resident Head of the University College Union, and by her earnest work, her indefatigable interest in individual students and her creation of high standards introduced a new life among the women. I wish here to express my high appreciation of what she has done. But the work so well begun must be carried further, and though I am very grateful to Miss Waddington for having consented to act as Resident Head of the Union in addition to her duties in the department of English, the experience of this opening academic year only emphasises the necessity of having some graduate devote her whole time to the deanship.

Collegiate life will never be what it should be in University College until residences for men and women with a Union for the latter have been provided in addition to proper class-room accommodation. Our students, drawn as they are from every section of Ontario as well as other parts of the Dominion, and from all classes in society, are material of first-rate quality, but without suitable buildings to live and work in they are not getting what they should get from their college life; they are not educating one another as they might; they do not enjoy those rich gifts which are so uniquely afforded in the English and the old American College, a historical institution which both branches of the English-speaking world have preserved as distinctive in their educational system. It

remains for us also in Canada to preserve as a centre of liberal education the college bearing our own individual mark and affording opportunities for intercourse and friendship through the constant commingling of students.

That the intellectual standards of the University Colleges are high is shown by the successes of our Toronto Arts graduates who have continued their studies in Britain and the United States. Recently there have been several brilliant successes at Oxford, and a score of our graduates are now taking courses in British universities to which their entrance is made easy on account of the work done by their predecessors.

Our graduate work in Arts has been quietly growing. Last year there were 95 doing M.A. work, 37 preparing for the Ph.D. and other advanced degrees (including 3 for the M.D.), 31 in general graduate work, 163 in all. A good deal of attention was directed in the early spring to changes which it was hoped would improve the administration of this graduate work, and these proposals will soon be presented to the Senate for its consideration. Here again I must emphasise the need of more fellowships for graduate work. Present conditions have made it difficult for individuals who were able formerly to provide fellowships to continue to do so. But their provision is a necessity for the welfare of the country. In this respect we are far behind Britain. There the deserving but poor lad is given a chance in school, and if he has ability he can by means of scholarships win his way through Oxford or Cambridge. Britain offers an example of true democracy in the way of educating those who are to become her leaders, her experts in science and her scholars, and this example we shall do well to follow. The more exacting the standards become, the more intense their demand upon the continuous mental energy of those who are to succeed, and the longer the courses, the greater is the necessity for the establishment of scholarships to make the long and arduous journey feasible for many of those who are best qualified to undertake it.

In Medicine the new six years' course is working out satisfactorily, but in the later years already there is such congestion that sufficient clinical material will not be available in the hospitals of the city to afford satisfactory instruction to the individual student. Therefore the numbers of entrants are now being limited, and to place this limitation on a better basis a higher standard of entrance is to be required next year—pass in at least three subjects of honour matriculation.

For the general work of the Faculties of Medicine and Applied Science I refer to the reports of the Deans. In Medicine the most important event was the grant by the Rockefeller Foundation of the interest of one million dollars for the development of the Faculty. Thereby the reorganization of the surgical department somewhat on the lines of Medicine was made possible, under the direction of Dr. Clarence Starr as professor, who began his work on July 1st, 1921. In Applied Science the occupation of the new building for Electricity and Strength of Materials has been a great relief from an overcrowded condition, and has led us to expect confidently a rapid development of these departments, and indeed an improvement in the teaching of the whole Faculty. This University situated as it is should become one of the best centres in the world for advanced work in connection with Hydro-Electric power

Forestry has been rapidly recovering its pre-war numbers, and the Dean gives interesting information as to the destination of and demands for its graduates. But inadequately as this faculty was housed before the war, it is more so

now, and along with botany, has the worst accommodation of any scientific department in the University.

I wish to call attention to the report of Dean Vogt of the Faculty of Music, and especially to what he says about the transfer of the Toronto Conservatory of Music to the control of the Governors of the University involving as it does also a change in the conduct of our Local Examinations in Music. Henceforth the primary work in music will be done at the Conservatory and the degree work at the University. There will also be only one examination for the Local Examinations which will be conducted by the Conservatory of Music.

Research has been fully reported by those who are in charge of it. Its volume is large, and excellent results, some of which may soon have far-reaching consequences, are being obtained. Through the special grants made by the Governors for research the spirit of investigation has been greatly strengthened, and younger men are to be found in most departments, who, either on their own account or under the direction of others who have already much to their credit, recognize that scientific research not only heightens their own interest but is becoming an essential qualification in a member of the staff of a modern university.

Though what was formerly the Faculty of Education is now the Ontario College of Education the relationship of this department to the Board of Governors is happily unchanged, and I have pleasure in presenting as usual the report of Dean Pakenham. As a result of the new policy the numbers were greatly reduced, those in training for first-class certificates having been assigned to the Normal Schools. All the students in the College of Education in the regular course were graduates in Arts. By reason of the smaller attendance of students and their comparatively similar grades of academic preparation much closer attention has been given to the individual by the members of the staff, and graduate work has now been made possible to a greater extent than formerly.

Mr. Dunlop, who was placed in charge of the Departments of Extension and Publicity, presents a full and very satisfactory report showing what a field of usefulness is opening up to the University in various directions beyond its borders. The demand for lectures may prove greater than our capacity to meet it. Various classes of the community are seeking help from the University, and the experiments in providing short courses for farmers in the winter and for journalists in the summer have been so successful that we can safely forecast large expansion in these and similar directions. The Summer Session and Teachers' Courses also have been rapidly growing in popularity.

For the first time Professor Dale has presented a report as Director of Social Service. The variety of the work he outlines and the improvement in its quality year by year has amply justified the University in establishing this department.

At the request of the Red Cross Society the University undertook to establish a course for Graduate Nurses. Miss E. K. Russell was appointed director, a thorough curriculum with instruction was provided, and over fifty full-time nurses were in attendance who have undertaken to serve the more outlying parts of the country for a certain number of years.

The social and athletic life of the men students has been well maintained through Hart House, the potentiality of which is being more completely realized each year. Also their general health has been well maintained. Both in the domestic and inter-university games the Toronto teams have had a remarkably successful year, but the students are to be especially commended for the spirit they have shown which cannot fail to have a good influence upon sport throughout the country. This University is particularly fortunate in possessing a body of graduates who are so deeply interested in athletic activities that they devote much time and thought in helping to maintain by their advice, along with the undergraduates, the highest and healthiest standard of sport throughout the university.

For the coming year Dr. Porter is to have complete supervision of the health of the men students, and is associated with the Department of Hygiene in the expectation that his results may be of much value in providing data with regard to the general health of the communities from which the students are drawn.

It is most unfortunate that the women students of the University are left without practically any means of promoting common intercollegiate social and athletic activities. They need this life quite as much as the men do; their health requires more careful attention; but we have no suitable building, and therefore cannot make athletics and attendant health supervision compulsory. The appointment of Dr. Edith Gordon on July 1st, 1921, as Medical Adviser for women is a step in the right direction, but without giving her better appliances we cannot expect the best results.

I cannot overlook the valuable co-operation of the Alumni Association during the year in making known the needs of the University to a very wide constituency. Many of our graduates devoted valuable time and energy when it was greatly needed, and without singling out any one above another it may be said that such a large number of graduates have never before been so actively devoted to the welfare of their Alma Mater.

Two special Convocations were held during the year, the first on August 10th, in connection with the visit of the Imperial Press Conference when degrees were conferred upon Robert Donald, Esq., Geoffrey E. Fairfax, Esq., Sir Robert Bruce and the Rt. Hon. Sir Gilbert Parker, Bart., the second on November 5th, in Hart House when an honorary degree was conferred upon Mr. Chester Daniel Massey.

Ten Organ Recitals were given by the University Organist, Mr. F. A. Mouré, covering the months of November to March inclusive. It is a matter of gratification that the attendance at these recitals has now grown to an average of 800 to 1000, an evidence of how much they are appreciated.

The following lectures and extra courses were given:—

Mr. Robert Mond, M.A., F.R.S. of London, England, lectured on "The Mortuary Chapels of the Theban Nobles"; Dr. C. Weizmann, Professor of Biochemistry in the University of Manchester on "The Proposed Jewish University at Jerusalem"; Three lectures were given by Dr. Edgar T. Wherry, of the Bureau of Chemistry, Washington, D.C., on "Optical Crystallography Applied to Chemical Problems"; "Crystal Habit" and "Soil Acidity and Plant Distribution"; a short course on "Christian Art" by Dr. Joseph Pijoan, showing

the development of the different schools of art and architecture throughout the Middle Ages in Europe ; the Saturday Afternoon Course consisted of lectures by the Rev. F. J. Foakes Jackson, D.D., on "Margaret Catchpole, A study in East Anglian Life and in Literary Criticism"; Professor W. D. Woodhead, M.A., on "The Case for Greek" ; Professor Marcel Moraud, L. ès L., on "Anatole France as an Exponent of Modern French" ; Professor Andrew Hunter, M.B., Ch.B., on "Digestion" ; Professor C. T. Currelly, M.A., on "Recent Developments in our Knowledge of Chinese Art" ; Professor M. A. Buchanan, M.A., Ph.D., on "Lope de Vega and the Spanish Drama" ; Professor J. G. Fitzgerald, M.B., on "The Practice of Preventive Medicine" ; Professor Pelham Edgar, B.A., Ph.D., on "Novels and Poems of Thomas Hardy" ; and the Rev. Abbé Dimnet, on "Coming Men in French Literature."

We thank Sir Bertram Windle, F.R.S., for again providing a most instructive course of twelve lectures on "The Roman Occupation of Britain," which were largely attended.

One of the noteworthy events of the year was the Conference conducted in the Physics Department on "Recent Problems in Physics." Physicists from nearly every University in the Dominion attended this Conference, being drawn by the courses of lectures given by Dr. Silberstein and by Dr. Langmuir on "Relativity." Lectures were also delivered by our own and other Canadian physicists.

The grant from the Rockefeller Foundation of the interest of one million dollars for the development of Medicine has already been referred to. These additional benefactions have been received during the year: J. Harrington Walker Bequest for Residences $15,000, Khaki University Memorial Scholarships $12,000, from Canadian Red Cross Society for Public Health Nursing $4,500, from Sir John M. Gibson for Gibson Pass Matriculation Scholarships $4,000, from Canadian Oral Prophylactic Association for Dental Research, $3,000, the William Hardie Scholarship (Ottawa) $1,000, from Professor John Squair for Squair French Library Fund $1,000, Pathological Special Investigation Fund from Sir Edmund Osler $1,000, and an Anonymous Donor $500; Graduate Fellowships, one from Colonel R. W. Leonard $500, two from Sir Edmund Osler $1,000, the R. A. Reeve Prize $100, R. A. Reeve Bequest $800, John Hughes Horton Bequest $650, and from the Marion Dickenson Estate on account of the Marion Dickenson Scholarship in Household Science $200.

Also during the year the Committee of the Alumni Association have made loans amounting to $46,399 to 214 returned soldier-students. Already these loans are being repaid and the capital will then be used for providing scholarships for the children or relatives of soldiers.

Again I cannot but refer to the effect in retarding the development of the University which has been produced by our uncertainty as to what financial support can be relied upon. The staff are anxious as to their own future, it is difficult to make offers to men who are called to fill vacancies, and the youth of the country in attendance are not getting all that with some reasonable and reliable annual increase we should offer them. Nor can the University reach out through its extension to meet the opportunities which have been so splendidly manifested by Mr. Dunlop even in the first year of his work. His report shows what lies to our own hand to do if only we have the financial means. The people

young and old want education. Only in a widely cultivated and diversified society such as higher education creates will even those economic interests be constantly called into being which both make and satisfy a productive population. Mere material development will soon exhaust itself by producing a narrow people with few interests, whereas a broadly and highly educated community will become not merely increasingly efficient, but will afford occupation for skilled workers both urban and rural, and will demand a more varied production to meet the growing needs of an enriched country.

All of which is respectfully submitted.

ROBERT A. FALCONER,
President.

November 5th, 1921.

APPENDIX A

(1) Report of the Principal of University College.
(2) Report of the Dean of the Faculty of Medicine.
(3) Report of the Dean of the Faculty of Applied Science and Engineering.
(4) Report of the Dean of the Faculty of Forestry.
(5) Report of the Dean of the Ontario College of Education.
(6) Report of the Dean of the Faculty of Music.
(7) Report of the Chairman of the Board of Graduate Studies.
(8) Report on Research.
(9) Report of the Librarian.
(10) Report of the Director of the Department of Social Science.
(11) Report of the Director of University Extension and Publicity.
(12) Report of the Director of Department of Military Studies.
(13) Report of the Physical Director.
(14) Report of the Director of the Connaught Antitoxin Laboratories.
(15) Report of Department of Public Health Nursing.
(16) Statement regarding the Biological Museum.
(17) Statement regarding the Museum of Geology.
(18) Statement regarding the Museum of Palæontology.
(19) Statement regarding the Mineralogical Museum.

(1) REPORT OF THE PRINCIPAL OF UNIVERSITY COLLEGE.

(PROFESSOR M. HUTTON).

The Session of 1920-1921 has witnessed a certain long over-due awakening of the student body of University College.

My last report was concerned with the crowding out of the College from its own building and the encroachments of the departments of administration.

The students have caught another aspect of these encroachments: they have felt that the College in losing its local centre and its grip on the mis-called "Main Building"—a misnomer very significant of the extent to which the encroachment has gone—was losing its separate identity, and any *esprit de corps* which had managed to survive: when lectures were being delivered in the kitchen, when the classical staff could only be exhumed from sculleries, when the large lectures

in English and Latin could only be found in Medical Buildings or Dining Halls, it seemed unreal and a mockery to give the name of "University College" to another building which saw none of these lectures but was engrossed with the paying of fees and enquiries about the curriculum: and if there was no University College what college spirit was possible?

The general unrest in this and larger forms has had two results: the appointment by the Government of a Committee to report on the needs of the University and College, and the appointment also by the students of a Committee to report on the best means of quickening the corporate spirit of the students of University College.

The students' Committee was started by the student society: the old Literary and Scientific Society which has a long and not inglorious history of some sixty-seven years; and was the original on which the Medical Society and the Engineering Society were based.

It throws a curious side light on the War and on the degree to which the War altered everything, that the Literary and Scientific Society should have lost its hold among a body so conservative as University students: but so it was: the men went to the front in the War: the handful that remained could not maintain the Society and it lapsed: and when the War ceased and the opportunity came for its revival, it seemed too late.

For the lapse had revealed the weak spot in the organization of the society: it was, at least nominally, a debating society: it did not represent the one interest that is strong in all student assemblies and paramount in some, the athletic element.

But the athletes who had served the country nobly in war returned all the stronger for athletics when peace came. They have illustrated it by winning already two Canadian Championships this year in Rugby Football and Hockey. They illustrated it also by asking for better representation in the Student Society of University College than they had ever received in the Literary and Scientific Society. Accordingly the name has been changed to the Literary and Athletic Society and a compulsory fee asked for, which will be spent (on the system of responsible government), by the Executive of the Society, elected by the whole body of male students and responsible to the same, and which also, by providing the money required for athletics will give college spirit and athletic capacity a chance to show itself for the first time freely and without great obstacles in the College; the debating side of the society meanwhile will continue and continue to justify the first part of the society's name.

To turn from the students to the official Government of the University, the Commission appointed to enquire was sufficiently impressed by the kitchens and sculleries where it found students and professors at work to recommend the completion of University College by a north wing, and the building of an Administration Building to set free the south, east and west wings from administrative uses.

This report has not yet been accepted by the Government at the time of writing, but if it be carried out in essentials the same session will have witnessed urgent reforms in the conduct of University College initiated and successfully prosecuted both by the students and by the Province.

I append the figures showing the number of students, the largest yet recorded:

	Men.	Women.	Total
First Year	264	191	455
Second Year	166	130	296
Third Year	103	91	194
Fourth Year	69	97	166
Occasionals	30	30	60
	632	539	1,171

(2) Report of the Dean of the Faculty of Medicine.

(Professor A. Primrose).

Two factors contribute to create an abnormal situation in the conduct of the Course in Medicine at the present time. In the first place the number of students in attendance is far in excess of that which should obtain or has hitherto existed. This is mainly due to the fact that provision had to be made for returned soldiers who had qualified for the Course in Medicine, or who had already entered upon their course before going to the War. In the second place we are passing through a transition period from the five year course to the six year course. This factor causes increased difficulty because of the circumstance that at the beginning of the session 1919-20, when the six year course was introduced, certain of the returned soldiers were eligible to enter the five year course and were so registered, while others, beginning their Medical Studies at the same date, enrolled in the six year course. The result is that the second year of the session 1920-21, contained 212 students of the five year course and 148 students of the six year course. This doubling up of that particular group of students must continue through the final years until the session 1923-24 has been passed.

The first factor mentioned above is not wholly solved by the disposal of the returned soldiers. The tendency is for the entering class in Medicine to grow to proportions beyond that consistent with efficient provision for their instruction. This is true, in particular, concerning the final years of the course. The Council of the Faculty of Medicine have reported very fully to the Senate and the Board of Governors on this matter and have shown conclusively that it is impossible to provide adequate clinical facilities for the instruction of classes beyond a certain size. The University authorities have therefore determined to limit the size of the entering class in the future. The limitation will come into effect next session.

It would therefore appear that we cannot reach ideal conditions as to the size of classes in all years until the session 1926-27 has been passed. In the meantime every effort is being made to make the teaching of these large classes as efficient as circumstances will permit.

A considerable amount of progress has been made during the year in re-casting the Rules and Regulations of the Faculty concerning the Methods of Registration, Attendance and the Conduct of the Examinations of Students.

In the Preliminary Science Departments, the only change in the personnel of the permanent staff has been that J. M. D. Olmsted replaced A. C. Redfield as assistant-professor in Physiology. Dr. Olmsted was a Rhodes' Scholar in Oxford where he took the Degree of Master of Arts. He is also a Doctor of Philosophy of Harvard University. The Temporary Appointments, such as

those of Fellows, have not been sufficiently numerous to permit adequate oversight of the classes, but it is expected that this will be rectified during the session 1921-22.

In the Final Departments several changes have taken place. Professor I. H. Cameron has retired from the Chair of Surgery and Clinical Surgery which he has occupied for twenty-three years. For ten years previous to that date he had been professor of Surgery and Surgical Pathology. He therefore held a senior position in the Department of Surgery continuously since the Re-organization of the Faculty in 1887. In 1897 he succeeded the late Professor W. T. Aikins as Head of the Department of Surgery. Throughout this long period of thirty-three years Professor Cameron has served his Alma Mater with great distinction both in the Faculty of Medicine and in the Senate of the University. In recognition of his scholarly attainments and of his service, the University of Edinburgh conferred upon him the Honorary Degree of LL.D. His distinguished career was also recognized abroad when he received, *honoris causa*, the Fellowships of the Royal College of Surgeons of England, of the Royal College of Surgeons of Edinburgh and of the Royal College of Surgeons of Ireland. More recently the honorary Fellowship of the American College of Surgeons has been conferred upon him. His retirement from the active teaching staff is a matter of sincere regret to his colleagues. He has been created an Emeritus Professor. He remains a member of the Senate and, it is hoped, his valued service will long be retained in that capacity for the University.

In the Department of Ophthalmology and Otology there has been the retirement of Dr. G. H. Burnham. He was appointed associate-professor in 1896 and became full professor in 1903. He now becomes Emeritus Professor. In the Department of Medical Jurisprudence Dr. N. A. Powell has retired from the Chair. Dr. Powell was appointed in 1903 in succession to the late Dr. Bertram Spencer. Both Dr. Powell and Dr. Burnham have rendered most valuable service to the University over a long period of years. Each, on his retirement, has been created an Emeritus Professor.

The Chair of Medical Jurisprudence has been filled by the appointment of Dr. Gideon Silverthorn. For some years Dr. Silverthorn has been a member of the teaching Staff in Surgery. He is a graduate of the University of Toronto, and is an acknowledged authority in Medico-legal matters. His wide experience in such matters will be of great value in the discharge of his duties in connection with the Chair.

The Chair of Pathological Chemistry, vacated when Professor Andrew Hunter was transferred to the Chair of Biochemistry, has been filled by the appointment of Dr. Victor John Harding. He is a Doctor of Science of Victoria University, Manchester, England, and comes to us from McGill University where he was a member of the teaching Staff in Chemistry.

Owing to the retirement of Professor Cameron, Professor Primrose was appointed interim head of the Department of Surgery until such time as a permanent appointment should be made.

Dr. Cyril Gray Imrie formerly Lecturer in Pathological Chemistry has been transferred from this University to the Department of Physiology in the University of Sheffield, England, where he assumes duty under Professor Leathes the former Professor of Pathological Chemistry in the University of Toronto.

Dr. Norman Macdonnell Keith, a member of the full time Staff of the

Department of Medicine of this University has been transferred to the Medical Department of the Mayo Foundation, Rochester, Minnesota, where he is in charge of the Cardio-Renal Clinic.

In the Department of Anatomy it has been found extremely difficult to conduct the work in Practical Anatomy because of the inadequacy of space and the difficulty in securing a sufficient amount of material in the Dissecting Room for the large classes. It is expected that these difficulties will be overcome in the near future by the erection of a new anatomical building, by the reduction in the number of students in attendance and by the enlargement of the Staff.

The other laboratory departments have been grossly over-crowded during the session. It has been necessary to divide the classes into groups and to repeat much of the instruction in order that the work should be covered. This has entailed great hardship on many members of the teaching Staff, particularly because of the fact that it robs them of time which should be available for Research. When the number of students has been reduced it will be possible, with the present Staff, to allow each member a reasonable amount of uninterrupted time for this essential part of his work.

The new (six years) course has been in operation for two years. The experience gained during these two years has shown that the combination of a certain amount of Arts work with the regular Medical curriculum is a success. During the first year of the course each student must select one Arts subject, and the following was the enrollment in each option so chosen—College English 53, Mathematics 13, French 77, German 8. During the second year, when two options were required, one of which must be an Arts subject, the numbers in each were—Economics 58, Psychology 40, History 8, Mathematics 13,College English 8, Quantitative Chemistry 50, Biology 56, Physics 17, Philosophy 22.

During the session Post-Graduate Instruction has been organized and undertaken in a more effective manner than has hitherto existed. This has been accomplished partly by offering short review clinical courses during vacation periods of the session and partly by sending lecturers to different parts of the Province. The clinical courses given by different members of the regular teaching Staff during vacation have been well attended and highly appreciated. One such course was given at Christmas vacation and another during the latter part of the month of May. A schedule advertising a series of lectures has been issued to our Medical graduates throughout the Province. This has been done in the shape of a "Bulletin" which has been circulated from time to time and which contains, in addition to the schedule of lectures, a short series of articles on practical subjects indicating the most recent methods of diagnosis and treatment of disease. The courses of lectures have been taken advantage of by numerous groups of medical men and medical Societies throughout the Province which have applied to the medical faculty for the courses advertised and to which lecturers have been sent.

In spite of the severe handicap to the conduct of Research already alluded to, a considerable amount of Research work has been accomplished. A full account of this will be included in the special memorandum on Research which accompanies this Report.

The annual donation of $50,000.00 to this medical school by the Rockefeller Foundation is now available and it is expected that it will be used largely to develop the Department of Surgery and other clinical subjects along lines similar to

those which have proved so successful and have been made possible, in the Department of Medicine by the endowment of the Chair by Sir John and Lady Eaton. The Rockefeller Gift will also assist in the development of Departments other than Clinical. There is every reason to believe that if the proposed plans are carried into effect the Medical Department of this University will stand in the very front rank among Medical Schools of this Continent.

(3) Report of the Dean of the Faculty of Applied Science and Engineering (C.H. Mitchell, Esq., LL.D.)

The Session now concluding, the second since the termination of the war, has been not only most satisfactory but marked in this Faculty by several features which are of interest.

The incoming first year, much smaller than that preceding, has indicated the effect of the increased entrance requirements which now, in the light of the annual examinations just concluded, seem to be entirely justified. The completion of the new building and its occupation by the Departments of Electrical Engineering and Applied Mechanics not only places these portions of the Faculty in an exceedingly favourable position but has enabled a certain readjustment of space in the old Engineering Building which will be very advantageous to those Departments housed there. The inauguration of instruction at the summer survey camp at Gull Lake in August last is a progressive step making for increased efficiency and economy in time and space during the regular academic Sessions.

By a curious coincidence the total number in attendance in this Faculty this Session was practically the same as last year, 807 divided amongst seven departments, the largest being in Electrical Engineering and the others being Mechanical, Civil, Chemical Mining, Architectural and Mettalurgical, decreasing in the order named. The interesting feature of these figures is the clearly indicated swing towards the specially industrial branches of the Engineering profession which indeed is a reflection of the situation throughout Canada at the present time. The following table shows the distribution of students in these various departments by years:—

Year 1920-1921.

	First Year	Second Year	Third Year	Fourth Year	Total
Civil Engineering	29	58	30	37	154
Mining Engineering	13	25	16	12	66
Mechanical Engineering	44	56	33	26	159
Architecture	10	11	3	9	33
Analytical Chemistry	..	..	..	15	15
Chemical Engineering	32	66	38	10	146
Electrical Engineering	60	93	40	23	216
Metallurgical Engineering	3	9	3	3	*18
	191	318	163	135	807

*In addition to these in the regular Metallurgical Engineering there are 26 in Mining and 40 in Chemical Engineering of third and fourth years taking Metallurgy.

There is still a large proportion of soldiers in each year much decreased of course in the first year. It is gratifying to observe that they have done exceedingly well in the annual examinations just concluded. Of the 133 who passed the fourth year examinations 77 were soldiers and out of the 50 who obtained

honours 31 were soldiers. Of the 149 who passed the third year 64 were soldiers and of the 48 who obtained honours 14 were soldiers. Of the 283 who passed the second year 114 were soldiers, and of the 72 who obtained honours 30 were soldiers. Of the 164 who passed the first year 43 were soldiers. Those students who have had their education dislocated by the war may now be said to have recovered their places and it is gratifying to realize that they are now practically all back to normal.

Amongst the students themselves there has been a gratifying improvement in the character of their activities and in their relationship to the profession generally; this was particularly evidenced in their participation in various professional activities in the City and Province, notably in the Annual Meeting of the Engineering Institute of Canada which this year was held in Toronto. Many of these students in their control of student affairs and in their technical, academic and athletic interests have notable displayed their powers of organization and executive which are valuable features of their education in Engineering.

The Department of Civil Engineering and Applied Mechanics is being slightly reorganized mainly consequent on its removal to the new building. While the various types of equipment in testing laboratories have been fully employed there is much need for further equipment. The Departments of Surveying and Drawing, closely allied with this, have been taxed during the year with the large numbers of students: in Surveying there were 270 and in Drawing 697 carried though the various courses in this Faculty whilst there were 33 and 27 respectively of the Faculty of Forestry also provided for.

In Electrical Engineering the value of the new building is already being realized, although the removal into it will not be entirely completed until this autumn. With the two groups of laboratories in direct and alternating current and with the special instrument, high tension, radio telegraphy and research laboratories it is expected that henceforth much more effective work can be done.

In the Department of Mining Engineering there has been some advantageous modification and re-arrangement of work and an increased number of students has been accommodated. 72 students have been taking the work in the Assay Laboratory and 82 in the Milling and Mining Laboratory.

The Mechanical Engineering Department has suffered through want of additional apparatus much needed in the Steam and Hydraulic Laboratories. When it is considered that during the past Session 207 students of third and fourth years attended the Thermodynamics Laboratories each week and 197 of the same years attended the Hydraulic Laboratory each week an idea can be gained of the work performed and it must be kept in mind that the coming Session will be much heavier in point of numbers. This Department suffered a loss the past year by the withdrawal of Professor Arkley to a post in another University.

The Department of Architecture has been strengthened during the year by the addition of another Associate Professor on Design, Professor Adrian Berrington, late of Paris. The re-arrangement of space in the Engineering Building has provided this Department with very much increased accommodation. The Annual Exhibition of the Architectural Club at Hart House in March was again a very fine indication of the excellence of work done by the students in this department.

Chemical Engineering has been very crowded. The problem of providing for the large second year is comparable only with that confronting it with the same

large number next year when it is going to be almost impossible to carry them. If this Department continues to grow in numbers there will be a very serious accommodation problem in the Chemistry and Mining Building.

The Department of Metallurgical Engineering has had an opportunity for expansion during the year and it now occupies the east end of the Chemistry and Mining Building, main floor. The authorization of an Assistant Professor will greatly increase its efficiency and with the new equipment and space much is now expected of this Department.

The School of Engineering Research has now fully justified its organization within this Faculty. The grouping of the seven departments of this Faculty into one organization for research in this manner has very much simplified the administration, has co-ordinated the effort and has produced an economic efficiency which is most gratifying. During the past year the progress of the work of research has been as great as could reasonably be expected bearing in mind the load of lectures and laboratory teaching born by members of the staff. No 2 Bulletin with the results of the year's work is now in process of publication. It is interesting to note and it is with a degree of satisfaction that the members of this Faculty, busy as they have been with the regular work of instruction, have been able during the past twelve months to carry out researches on 30 subjects, divided as follows:—4 in Civil Engineering, 3 in Mining Engineering, 5 in Mechanical Engineering, 11 in Chemical Engineering, 4 in Electrical Engineering and 3 in Metallurgical Engineering.

This Faculty sustained last Autumn a very grave loss in the death of Dr. W. H. Ellis, late Dean of the Faculty; his presence with us as Professor Emeritus was regarded as of the greatest value, the Faculty relying on him very much for his wise counsel and advice. His absence is greatly felt.

(4) Report of the Dean of the Faculty of Forestry.

(Dr. C. D. Howe.)

The Faculty of Forestry completed the year with the largest enrolment of students since it was established in 1907. According to classes, they were distributed as follows: First Year 20, Second Year 17, Third Year 10, Fourth Year 6, Special 1, Occasional 1—55 in all.

The year's graduates are six in number, five from the four-year course and one from the six-year course. They all had positions waiting for them, two being employed by the Dominion Forestry Branch at Ottawa, two by the British Columbia Forest Branch, and two by private companies, the Riordon Company and the Wayagamack Pulp and Paper Company, both in Quebec.

Owing to the depression in the pulp and paper trade only half as many undergraduates are employed by private companies as last summer. However, a much larger number are being utilized by the Ontario Forestry Branch and thus an otherwise embarrassing condition has been avoided. The Province is using 16 of the undergraduates for the summer months, the Dominion Forestry Branch 15, pulp and paper companies 11, the Entomological Branch 1, and private employment not related to forestry 6.

Suggested lines of development for the Faculty of Forestry were outlined to you in last year's annual report. These were elaborated in the report laid before the Royal Commission on University affairs, wherein four things were

specifically recommended, namely: (1) a permanent practice camp and forest experiment station, (2) postgraduate courses leading to the degree of Master of Forestry, (3) a forest rangers' course, and (4) a forest products museum. The materialization of the first three of the above items would involve a capital expenditure of approximately $13,000 and an increase in the annual budget of at least $9,000 for current expenses, in addition to the cost of a new building. We shall expect the fulfilment of these plans within the next few years, for without it we cannot attain our full measure of usefulness in the forestry education of the Province and Dominion.

(5) Report of the Dean of the Ontario College of Education.

(Dr. W. Pakenham).

The Ontario College of Education has completed its first year under its new name. Its first purpose is to train High School Assistants and Specialists for the schools of Ontario; its second to give instruction in Advanced Education. In fulfilling these purposes the College is in reality a Graduate School. During the Session it enrolled in its course for High School Assistants and Specialists ninety-seven students, in its courses for degrees in Pedagogy one hundred and thirteen, and its courses for the degree of M.A., under the Board of Graduate Studies eighteen. All these students were graduates in Arts.

Soon after the beginning of the Session a course for the Elementary certificate in Art was instituted. Twenty-four completed this course. To equip graduates in Arts for public school posts, the students in the High School Assistant's course were offered the option of a supplementary course for First Class Public School certificates. Twenty-six accepted the offer. At the same time the course for the Ordinary certificate in Household Science was transferred to temporary quarters in the College with seventeen students in registration.

The transfer of the Faculty Entrants or First Class students to the Normal Schools has reduced the total attendance at the College. But it has enabled the staff to give more time to the training of the High School Assistants and in particular to the practice-teaching in the University of Toronto Schools.

The transfer of the course for Ordinary certificates in Household Science and the emphasis now placed upon the course in Physical Training have made still more marked the limitations of the present buildings. It is a satisfaction to note that in its last session the Legislature made an initial appropriation of $50,000 to complete the buildings.

(6) Report of the Dean of the Faculty of Music.

(Dr. A. S. Vogt).

The registration of students for the course leading to the degree of Bachelor of Music was as follows: First Year, 9; Second Year, 3; Third Year, 4; Occasional students, 2; total, 18.

The number of candidates entering for the University's Local Examinations in Music during the year totalled 613. Of these 511 entered for examinations in piano playing; 26 in singing; 1 in violin; and 75 in the Theory of Music. Successful candidates totalled 553.

A series of eighteen lectures was delivered by members of the Faculty as follows:

Healey Willan, Esq., Mus. Doc., F.R.C.O.
January 10—"Various Chords of the Seventh."
January 24—"Modulation."
February 7—"Harmonisation of Melodies."
February 21—"Counterpoint" (with special reference to the minor key).
March 7—"Counterpoint" (combined species).
March 14—"Fugue."
January 14—"Bach's Church Cantatas and their Libretti."

Albert Ham, Esq., Mus. Doc., F.R.C.O.
January 28—"Bach, the Church Organist, and his Predecessors."
February 10—"Early English Composers of the Latin School."
February 17—"Church Anthems."

F. A. Mouré, Esq.,
January 17—"Some Old English Worthies."
January 31—"The Transition from the Classical to the Romantic Period."
February 14—"The Later Romantic School."
February 28—"Programme music."

H. A. Fricker, Esq., M.A., Mus. Bac., F.R.C.O.
January 21—"Bach's 48 Preludes and Fugues."
February 25)
March 4) The Choral and Orchestral music performed at the Mendelssohn
March 11) Choir Concerts, April 11, 12 and 13.

The special series of organ recitals given during the season by F. A. Mouré, Esq., University Organist, again created much interest and were attended by large audiences of students and music lovers generally. Mr. Mouré's programmes covered a wide range of organ music illustrative of the most important and attractive features of the foremost schools of organ composition, classical and modern.

Important changes in the relation of the Toronto Conservatory of Music to the University of Toronto.

An event of outstanding importance in the history of music in Canada transpired during the year in the completion of the steps necessary to pass the trusteeship of the Toronto Conservatory of Music from private hands to the University of Toronto. The Conservatory was founded in 1886 and after some years of operation, was established as a trust in the interests of music.

Realizing that it is essential that standards of music should, as far as possible, be set for the whole Province, and that this could be done only under the control of the Provincial University, those interested in the Toronto Conservatory of Music handed over to the Board of Governors of the University of Toronto the important trust held by them for many years for the advancement of musical education in Canada. This has been carried out under the terms of an Act of the Legislature passed in 1919. The management of the Conservatory will, therefore, in future, be directed by a special Board appointed by the University and responsible to the University Board of Governors.

It is confidently expected that real advantage will accrue to the general cause of music through the fusion of the Conservatory with the University—the Conservatory, through the agreement sanctioned by Act of Parliament, passing over to University control as a school of Music with well-established international prestige, fine equipment, and unsurpassed location. A large department of educational activity is thus being brought under the control of the Province of

Ontario without undue burden of oversight or expense to the University of Toronto or to the Province.

This new relation is not intended to interfere in any way with the development of other musical institutions, but it is confidently expected that it will tend to establish and maintain higher standards of music, and to standardize examinations under the supervision of the Faculty of Music of the University of Toronto, which examinations shall be open to the students of all other conservatories and musical bodies.

As the annual announcements relative to the Licentiate and Local Examinations in Music of both University and Conservatory had already been issued for the year, no change was made in the examination arrangements of either institution for this season. The University's Local Examinations in Music through the new arrangement will, however, in future be taken over by and conducted through the Conservatory..

(7) Report of the Chairman of the Board of Graduate Studies.

(Professor J. Playfair McMurrich).

The number of students enrolled for graduate studies in the Session 1920-1921 showed a slight increase over the preceding session, the total being 163. Of this number 150 were in attendance at the University and 13 were studying in absentia: 113 were men and 50 women. According to their geographical distribution the students may be classified as follows:

Residents of the Province of Ontario	135
Residents of other Provinces	16
Residents of other Countries, including Newfoundland	12
	163

and as regards their preliminary training as follows:

Graduates of the University of Toronto	118
Graduates of other Universities	45
	163

54 were members of the teaching staff of the University and 6 others were holders of fellowships but not engaged in teaching.

Their distribution in the various departments, based upon the subject chosen as the major study, was as follows: Anatomy, 1; Astronomy, 2; Biochemistry, 2; Biology, 3; Botany, 12; Chemistry, 15; Classics, 6; English, 16; Food Chemistry, 2; Forestry, 1; German, 1; Geology, 3; History, 9; Household Science, 2; Mathematics, 2; Medicine, 2; Mineralogy, 1; Oriental Languages, 4; Pathological Chemistry, 1; Philosophy, 24; Physics, 11; Physiology, 4; Political Science, 12; Romance Languages, 9; Theory of Education, 16; Zymology, 2.

The degrees sought are shown in the following table:

Candidates for the degree of Ph.D.	34
" " " " " M.A.	95
" " " " " M.D.	3
Students not candidates for a degree	31

During the session 52 candidates completed the requirements for the degree of M.A., 3 those for the degree of Ph.D. and 2 those for the degree of M.D. The

titles of the theses submitted for the degree of Ph.D. were as follows:

N. A. Clark: The Growth Rate of Yeast.

W. A. Lawrence: The Friedel and Crafts Reaction; some substituted Phthalic Anhydrides with Aluminum Chloride and Toluene.

M. E. Smith: The Friedel and Crafts Reaction: the Carbomethoxy-benzoyl Chlorides with Aromatic Hydrocarbons and Aluminum Chloride.

For some years, as the number of students pursuing Graduate Studies has increased, the lack of some common bond of organization has become more and more apparent. The work of the Graduate Student is specialized; he must necessarily spend the greater part of his time in the Department he has chosen and so will miss that opportunity for association with his fellow students in other Departments, which is one of the most important privileges and advantages of University life. To overcome to a certain extent the disadvantages of this isolation the graduate students some years ago organized themselves into a Graduate Students' Club which met from time to time for the discussion of matters of common interest and for social purposes. Such meetings, however, were only occasional, the Club having no definite meeting place, no habitation it could call its own. When the University Press moved to its new quarters, vacating rooms formerly occupied in the Library Building, one of these rooms was placed at the disposal of the Club to serve as a Graduate Students' Common Room, the necessary furniture and equipment being supplied partly by the University and partly by the generosity of the Student Medical Society and of the University Women's Club.

Good use was made of this Common Room after it became available and it is hoped that it may increase its usefulness in the future. It is, however, but a step towards remedying a serious defect in the organization of graduate studies. At present the graduate students have no such definite official status as is accorded to the undergraduates, an anomalous condition which becomes all the more marked in the case of graduate students who come to us from other Universities. It is hoped that this unfortunate condition of affairs will be corrected in the near future.

(8) Report on Research.

Psychology, Under Direction of Professor E. A. Bott.

1. *Psychological Tests for College Entrance Candidates.*—Last autumn a committee of the Staff decided that the value of such tests from the University point of view should be investigated. Through Professor Thorndike 500 sets of the Columbia material were procured at a reduced price. The cost of the material ($200.00) was met by a grant of $125 from the University and a like amount from the Committee for Mental Hygiene, a part of the latter sum being for clerical assistance.

A portion of the material was given to selected classes in the University, and subsequently by arrangement with the Department of Education, Toronto Board of Education and Principals the remainder was given to Form IV Collegiate pupils who will be writing matriculation this summer. Professors Sandiford, Lane, Pratt and Father Oliver assisted in giving the tests. The marking and collating is being done by the Psychology staff. The selection of students was as follows:

College of Education (teachers in training)	67	
Victoria College (First and Second Years)	40	
Faculty of Medicine (Second Year)	40	
St. Michael's College (First Year)	77	
		224
Parkdale Collegiate	44	
Oakwood Collegiate	39	
Jarvis Collegiate	41	
Riverdale Collegiate	39	
U. T. S. Form IV	40	
		203
		427

The purpose of this investigation is two-fold:

(1) To determine the prognostic value of the tests by measuring the degree of correspondence of pupils' ranking by the test score with their academic standing averaged over a number of years and verifying the result by their subsequent College record.

(2) To analyze the test results in detail with a view to adapting the material more perfectly for Canadian students.

Numerous problems are involved in each of these objectives which can only be solved by continuing the work on a statistical basis over a considerable period. The results to date are very promising judging from the correlations between the test scores and the previous marks of the students—this year's standing being not yet available.

The plan of investigation has received the fullest support and co-operation of Registrar Anglin, Inspector Rogers and Collegiate Principals and it is hoped the work can be carried forward until its practical value in the grading, promoting and advising of students who are planning to enter college has been demonstrated. Professor DeLury has suggested that all first year students in Mathematics be given the test at the beginning of next session and that their scores be made the basis of grouping for the year's instruction. Such an experiment would be of the greatest value.

2. *Analysis of voluntary muscle action.*—This problem is related to two fields of investigation. On the practical side during the past decade there has been considerable work on Applied Motion Study to determine the type of manual motion which is most economical of time and effort for a given job or operation. These studies have been conducted from the engineer's point of view with little attention to the mechanics of the body or the psychological factors involved in its functioning. On the theoretical side there are views regarding the conditions of enervation in opposed muscle groups. These however are based on physiological experiments upon anaesthesized animals.

The object of the present research is to discover the principles of voluntary muscle action by a direct method. A large number of subjects are required to perform a small movement of the wrist under accurately controlled conditions wherein the motion is graphically registered. This was made possible through the construction of special apparatus of sufficient strength and precision. A set of nine graphs under different conditions of position and load has been taken with forty medical students. Measurement of these curves reveals the nature of the movement throughout flexion and extension. Very definite results are being found. This part of the problem will be completed in the course of a few weeks.

The next step, which we wish to undertake next session, is to investigate the time relations of the voluntary nerve impulses to antagonistic muscles which p oduce the type of motion we have found to be characteristic. In this way the facts of muscle action can be related directly with a theory of enervation. The requirements for this investigation would be substantially the same as have been available for the problem this year.

PHYSICS. UNDER DIRECTION OF PROFESSOR J. C. McLENNAN.

A.

1. *Ultraviolet Spectroscopy.*—This research is being carried out by Professor J. C. McLennan assisted by P. Blackman and P. A. Petrie. It consists of two divisions. In the one, the aim is to map out the spectra of all the elements with a fluorite spectograph down to the wavelength $\lambda = 1400$ Å. u. In the other, the aim is to map out, with the aid of a vacuum grating spectrograph, the spectra of all elements down to approximately $\lambda = 250$ Å. u.

2. *Series Spectra.*—This investigation is being carried out by Professor McLennan in collaboration with Mr. W. W. Shaver. The object is to work out the series spectra of the elements Lead, Tin, and Thallium. No complete series spectra for these elements have hitherto been identified.

3. *Investigation on the relations existing between certain types of series spectra and the corresponding configurations of the electron systems in atoms and of the elements mercury, sodium, helium, and hydrogen.*—This investigation is being carried out by Mr. H. J. C. Ireton who is at present working on the element mercury.

4. *On the frequency differences in the Balmer double series of Hydrogen.* —This investigation is being carried out by Professor McLennan in collaboration with Mr. P. Lowe. Its object is to measure by interferometer methods, using Lummer plates and an echelon spectrograph, the frequency differences between the doublets of the series higher than the first two numbers, these having already been determined by Merton.

5. *On the production of triatomic Hydrogen by the action of extremely short wavelengths.*—This investigation is being carried out by Mr. W. W. Shaver. In this investigation the source of the light is the arc in Helium. By means of a specially designed arrangement, the light from this arc will be projected into a stream of Hydrogen. The production of H_3 will be detected by suitable chemical reagents. It is proposed to apply the method to investigate the effect of short light waves on nitrogen and other gases as well, with a view to seeing whether a method can be worked out for the production of ammonia, etc., by the action of light in place of a catalyst.

Note: Investigations Nos. 1, 2, 3, 4, and 5 are part of a general problem which is being investigated spectroscopically, namely, the investigation of the structure of the atoms of the elements and the energy required to ionise the atom of the elements.

6. *On the condensation methods of studying the recoil particles from Helium and Hydrogen and other gases produced by the action of alpha rays.*—This investigation is being carried out by Professor McLennan, in collaboration with Mr. W. C. McQuarrie. The method is based on C. T. R. Wilson's Cloud Experiments.

In this investigation it is hoped to get visual confirmation of certain theories of atomic disintegration which have been put forward. The general object of such investigations as this one is to see whether or not it is possible to work out a method of tapping the stores of energy known to be stored up in the atoms of the elements. It is in this direction that man must look for primary supplies of energy.

7. *Study of the magnetic properties of Heusler Alloys and other ferromagnetic bodies by means of Rontgen Rays.*—This investigation is being carried out by Mr. J. F. T. Young. It is hoped by testing the differences in the effects obtained with Heusler's Alloys and with simple mixtures of their constituents, viz., aluminium, manganese and copper, to get at the origin of the ferromagnetic property which is known to characterise the alloys. The results of this investigation should have a direct bearing on the solution of the problem of ferromagnetism generally.

8. *Piezo-electric studies of the pressures generated by explosions of mixtuures of various gases with air and with each other, and also by explosions of mixtures of the various constituents of paraffin oils with air.*—The object of this investigation which is being carried out by Mr. H. J. C. Ireton, who is following up the work of last year by Mr. H. R. Foreman, is first of all to collect important data on explosion pressures generated by various mixtures of gases and vapours and secondly to see if paraffin oils cannot be conserved by using, (for purposes for which it may be found they are the most suitable), the products obtained by fractional distillations.

9. *Investigations on the behaviour and properties of helium-filled incandescent filament lamps and of helium enclosed arc lamps.*—This investigation is being carried out by Professor McLennan in collaboration with Mr. F. W. Kemp, and Mr. Dobson, Director of the Ontario Hydro-Electric Laboratory, Strachan Avenue, Toronto. The object of this investigation is to see if helium can be used with advantage in the construction of illuminating agents. Some progress has already been made in producing a fairly efficient helium-filled lamp of the pointolite variety.

10. *Investigation of the natural gases of Alberta to see if they contain any of the rare gas Krypton and of the newly found isotopic form of Helium.*—This investigation is being carried out by Professor McLennan in collaboration with Mr. F. W. Aston, of the Cavendish Laboratory, Cambridge, England. Should a supply of Krypton be found available in Canada it would be of immense value to the incandescent lamp industries of the country. The investigation is being carried out by the use of the positive ray analysis method worked out by Sir J. J. Thomson and Mr. Aston.

11. *The Liquefaction of Helium.*—This investigation which is a costly one, is being carried out by Professor McLennan assisted by Mr. G. M. Shrum, in collaboration with Professor McTaggart, and with Professor Dawes, of McMaster University and Mr. John Patterson, Physicist to the Meteorological Office, Toronto.

This investigation involves the production of Liquid Air in large quantities and the production of Liquid Hydrogen in moderate quantities. The successful production of liquid Helium would at once open up a large field of investigation to the physicists, chemists, physiologists, zoologists, and botanists of Canada, for

it would enable us to study the properties of materials including chemical reactions the life of bacteria, spores, etc. at the lowest temperature attainable. This work should be carried on now that Helium is available in quantity in Canada. Full details of investigations in this field will be found in a paper by Professor McLennan on "Helium, its Production and Uses." Trans. of the Chem. Soc.

Up to date the liquid air plant has been installed and is operating successfully. The hydrogen liquefying plant has been completed and with it we have made liquid hydrogen on a number of occasions. The helium liquefaction apparatus is nearing completion and at present we are installing apparatus for purifying hydrogen and helium prior to using it for liquefaction.

B.

Research Work Now Being Carried out on the Subject of Colloidal Solutions under the Immediate Direction of Professor E. F. Burton. Students giving part time to the work: Miss I. Giles, M.A., and Mr. E. D. MacInnes, B.A. The work in hand is a continuation of investigations begun by Professor Burton at the Cavendish Laboratory, Cambridge, England, in 1904.

Among the many interesting properties of Colloidal Solutions, such as Ferric Hydroxide, Ordinary Black Ink, Gold Suspensions, etc., two are of special importance: the fact that the particles are all electrically charged and the coagulative action of even small traces of electrolytes. At the present time, experiments of technical importance are under way as follows:

1. *Coagulation of Colloidal Solutions by Electrolytes.*—In a recent paper on this work we believe that we have added a very important contribution to this phase of colloidal work which has been a vexed one for some years.

2. *Laws of Concentration of Colloidal Particles in Suspension.*—A continuation of experimental verification of the laws regulating the distribution of particles of various sizes in suspension.

3. *Experiments to determine the value of the mass of particles directly and the charge borne by them.*—These investigations comprise direct observation by ultra-microscope of individual particles in colloidal solutions. The application of the knowledge of colloidal solutions is very wide-spread in industrial life as well as in the study of physiology. Such manufacturing operations as we have in dyeing, tanning, rubber making, cement construction, ceramics, etc., are dependent for their advancement on a knowledge of the action of colloidal solutions. We feel that we are doing authoritative work in this field.

C.

Research Work Being Carried on by Professor L. Gilchrist.

The following is a statement of the research work on which he has been engaged:

1. *Study of the Electrical Stimulation of Nerves and Muscles.*—This work is carried on in collaboration with Miss McCullough in the Physiology Building under the auspices of the Military Research Committee of the C.A.M.C.

2. Study of the application of Planck's Law of Radiation to the Production of Temperature Standards and change of state.

3. Study of the Width of X-Ray Spectrum lines and the effect of Temperature of the Target on the lines.

The work of 2 and 3 was carried on at the Clarendon Physical Laboratory at Oxford during the summer of 1920.

D.

Research Work Being Carried on by Professor John Satterly.

1. *The Advance of the Ripple which appears in front of an ascending column of liquid.*—When a column of liquid rises up within a glass tube which has been previously wetted, a well defined ripple appears around the sides of the tube a short distance above the liquid surface. The research consists in studying the formation and advance of the ripple and their relation to the velocity and nature of the liquid, the diameter and nature of the tube, the time of draining and so on. The work may have application in the flotation process of ore separation.
erals, rocks, and waters for radioactive analysis. These analyses are performed.

2. *Radioactivity.*—At different times prospectors bring in samples of min- and the methods employed depending on the specimen, and the prospector profits by the information provided.

E.

Research Work Being Carried on by Professor McTaggart.

An important branch of research in Physics is the examination of electrical effects existing at liquid surfaces. In general, a small electric charge is found at any such surface as for example—around small particles in suspension in a liquid like sediment in water—or, in dyeing processes, around the fibres of the fabric when dipped in the solution, a similar charge exists at the boundaries of plant and animal cells and its influences on growth and disease are not fully understood.

The research is being limited at present to a study of the electric effects at the surface of aqueous solutions in contact with air or any gas.

Two papers on the subject have been published by the author:

1. Phil. Mag. Feb. 1914, p. 298.
2. Phil. Mag. Sept. 1914, p. 367.

The work has a bearing on such industrial problems as:

1. The purification of a water supply.
2. The production of stable suspensions in liquid, as for example, a soluble cocoa.
3. The action of mordants in dyeing.
4. Electrification in plant cells and cell growth.
5. Electrification in animal cells and its influence in health or disease.
6. The action of catalysing agents.

Botany, Under Direction of Professor J. H. Faull.

Papers have been published as follows:

1. "Some Characters of Xylem Tissue in Cycads." Botanical Gazette, December, 1920.

2. "The Seeds of Poisonous Weeds in Concentrated Feeds." Canadian Veterinary Record, November, 1920.

3. "Canadian Plants Injurious in Hay and Coarse Feeds." Canadian Veterinary Record, March, 1921.

4. "Longevity of the Seeds of Cereals, Clovers and Timothy." American Journal of Botany, June, 1920.

(The last paper was published during the University year 1919-20, but was too late to be included in the report for that year.)

In addition to the above the following projects are under way:

1. *Poisonous Plants of Canada.*—In collaboration with Professor Thomson, a book on this subject has been prepared and is now practically ready for publication. It is for use as a text book for Veterinary students, but there is also an outside need in Canada and the United States as well. It is illustrated by photographs and drawings, and aims to set forth in simple language, the published conclusions of other investigators, as well as the writer's results with poisonous weed seeds in ground feeds. It differs from any former work in two ways. The plants have been grouped on the basis of the conditions under which they cause trouble rather than strict botanical sequence, so as to make the volume more useful to veterinarians and stockmen. There is included a key, based, not on botanical characters but on symptoms.

2. *Anatomy of Cicuta maculata.*—This project was undertaken because of the need for knowledge of the histology of this poisonous plant in the analysis of stomach contents in cases of poisoning. As the work progresses it is proving equally interesting from the standpoint of comparative anatomy.

3. *Investigation of Poisonous Weed Seeds.*—This project is following two lines, pharmacological and histological. In the former, the Pharmacology Department of the Faculty of Medicine is co-operating. Supplies of pure seed have been obtained and are being fed to various small animals and their effects noted. For practical purposes these effects should be correlated with their effects on other animals. In the second place, as various seeds are proved to be poisonous their histology will be worked out so that they may be identified microscopically when ground up in concentrated feeds.

Zymology, Under Direction of Professor H. B. Speakman.

Earlier in the session the Department was transferred from the old laboratories to new and larger quarters situated in the Medical Building. The work of the Department has been improved by being brought into closer contact with related subjects. In addition, it is now possible for students to enter more fully into the life of the University.

During the year several new fields of research have been opened, and a broader basis given to our work. At the present time none of the work is completed and ready for publication. This is due in part to the fact that at the commencement of the session two months were lost owing to delays in the arrival of essential equipment for the laboratories.

Mr. Wynne has continued his study of the influence of numerous acids, over a wide range of concentration, on the fermentation of starch. His results are not only of interest as a source of new light on the biochemical mechanism of a particular organism, but are of value from the general physiological standpoint.

During the second term Miss Howell has made preliminary observations in connection with the influence of X-ray treatment on the growth and metabolism of some of the lower plant forms, particularly molds and yeasts. This is a problem which, in addition to its scientific interest, may yield results capable of clinical

application. The work is being done in co-operation with the Department of Physics, on behalf of the Medical Research Committee of the Department of Health, Ottawa.

In connection with the application of the work of this Department in the solution of economic problems two investigations have been carried out. Mr. Berkeley has endeavoured to find means whereby the abundant supplies of sulphite liquor in this country, now being wasted, could be utilized in general fermentation industries. Although the problem is an old one, as is shown by the literature on the subject, he has made a contribution to its solution by studying the effect of the liquor on pentose fermenting bacteria. The pentose sugars are present in large amounts, and are not fermented by the great majority of yeasts. For this reason the yield of ordinary alcohol from sulphite liquor, fermented by yeast, is very low. The pentose fermenting bacteria are characterized by their valuable end-products. Mr. Berkeley's results show that eventually these sugars will be utilized. He has presented a full report on this work to the Advisory Council for Industrial and Scientific Research.

Mr. Robinson has investigated in a somewhat similar manner the possibility of utilizing molasses. By very convincing experimental results he has shown that inhibition of the fermenting cells is due to a high concentration of soluble salts in the molasses. This obstacle has been overcome, and the yields of acetone and butyl alcohol are equal to those from starch in commercial plants. His work has been the subject of several reports made to the Atlas Powder Company, Ltd., which company has supported this investigation.

Mr. Robinson has been able in connection with the work to make a study of the relationship between molecular structure in several of the groups of sugars and their fermentability by the same bacillus. His results are of theoretical value and will probably be ready for publication later in the year.

Mr. Forsythe during his fourth year as a student in the Department of Chemistry has taken his elective special subject in this Department. He has started a study of the fermentation of glucose by bacillus aceto-ethylicum, and already valuable results have been obtained.

Biochemistry Under Direction of Professor A. Hunter.

I have the honor to submit the following report upon the researches which have been in progress during the past year in the Department of Biochemistry.

(1) I have continued my study of the manner in which protein is hydrolyzed under the influence of the ferment trypsin, and of the products arising at certain stages of the reaction. This research has proved to be of greater difficulty than was anticipated, and as I am able to take it up only intermittently, the progress made has not been very rapid. Some definite results have nevertheless been obtained, and have been recently presented to the Royal Society of Canada in a preliminary note. Among other things it has proved possible to isolate a polypeptide, or mixture of polypeptides, which is particularly rich in histidine and proline, and from which lysine (and probably also arginine) is entirely absent.

(2) Mr. N. S. Clarke is engaged in work similar to my own, but dealing with a different protein. He has encountered the same difficulties as I did, and is hardly ready yet to report progress.

(3) Mr. Borsook has commenced a study of the differences in amino-acid makeup between various proteoses derived from hemoglobin.

(4) Mr. Urquhart has been studying the possibility of obtaining unsaturated acids by the action of bacteria upon amino-acids. He has conformed the observations of Raistrick upon the origin of urocanic acid from histidine, and is now endeavoring to produce cinnanic acid in a similar way from phenyl-alanine.

(5) Mr. Morrell has succeeded in working out a technique which makes possible the determination of arginine by the combined action of the enzymes arginase and urease; and has commenced a study of the kinetics of the action of arginase.

(6) Mr. Green has completed a preliminary study of the progress of protein hydrolysis under the influence of strong acids.

(7) Mr. Berkeley is studying the metabolism of certain fungi of economic importance, and has already obtained results of some importance.

Physiology Under Direction of Professor J. J. R. Macleod.

J. J. R. Macleod, S. U. Page, and L. H. Kilborn—

In continuance of the investigations into the mode of control of the respiratory centre in decerebrate animals, which were published in the March number of the American Journal of Physiology, the attempt has been made to determine whether evidence of excitement first sets in at the moment when the arterial blood becomes measurably unsaturated with oxygen. To determine this important point, the minute volume of breathing has been compared with the oxygen dissociation curve of the arterial blood and with the tension of oxygen (and carbon dioxide) in the alveolar air. The results have been satisfactory and it is hoped that during the summer one or more papers will be ready for publication. The practical importance of these investigations centres on the light they throw on the mechanism for the exchange of gases between the blood and air sacs and on the effect of breathing oxygen in the relief of the symptoms of pneumonia and other forms of disease in which there is pulmonary disturbance.

J. J. R. Macleod—

Further work has been done on the significance of lactic acid in the animal economy and one paper was published (in the American Journal of Physiology) on this aspect of the work during the year. In the earlier months of the year the attempt was made to cause lactic acid to accumulate in the blood by "blowing off" the carbon dioxide of the blood by forced ventilation of the lungs. Such a decrease in the volatile acid of the blood, it was thought, might cause more volatile acid, such as lactic, to take its place so as to maintain at a constant level the total acid radicles in the blood. The results were negative. More recently, work has been done on the rate of disappearance of lactic acid from the organism when certain quantities of this substance are injected intravenously, as well as, on the rate at which it appears in blood after this has been removed from the body. The results in these two particulars are definite and will be published shortly. In this research the painstaking assistance of Miss M. E. Armour has been invaluable.

J. J. R. Macleod and N. B. Taylor—

With the assistance of a grant made by the Department of Militia and Defence, work has been continued on the spread of temperature changes in living tissues during the application of heat or cold to the surface of the body. The spread of heat is measured by means of small thermocouples enclosed in hypodermic needles which are placed at varying depths in different regions of the body. The

thermocouples are connected with a potentiometer and galvanometer so that very minute changes in temperature can be measured. Professor Burton of the Department of Physics has greatly assisted us in this work. Very important practical results have been secured, such as, that temperature differences spread very readily in resting muscle, in subcutaneous tissue and in the brain but that the spread is very slow in the liver and kidneys. Many of the results of these investigations have already been published during the year in the *Lancet*.

J. J. R. Macleod, E. C. Noble and C. H. Best—

An investigation is under way into the behaviour of the sugar of the blood in turtles. The research is designed to determine whether variations occur in the concentration of this substance under conditions similar to those which are known to cause them in mammals. If this should be found to be the case an opportunity will be afforded to study certain problems in carbohydrate metabolism which it is difficult to undertake in mammals.

N. B. Taylor—

Work on the volume of blood flow through the hands under various physiological conditions is being continued with and an extensive paper has been prepared for publication in *Heart*. Many interesting facts have come to light such as that drafts have a profound effect in changing the blood flow whereas massage has very little influence. A very close relationship between the atmospheric temperature and the blood flow has been demonstrated. This investigation has been assisted financially by the Department of Militia and Defence.

N. B. Taylor and H. M. Cameron—

In the course of the practical class work it was discovered that Mr. Cameron, a third year student of medicine, exhibits a very unusual phenomenon, namely that he can accelerate the heart beat and raise the blood pressure voluntarily without doing muscular exercise. The phenomenon is being thoroughly investigated by all known methods and for this purpose Mr. Cameron has been temporarily appointed on the staff of the department for part of the summer vacation. This is made possible by aid received from the Research Fund. It is by the investigation of problems of this nature *i.e.* of cases bordering on the pathological, that important facts of clinical value can often be brought to light.

N. B. Taylor, J. M. D. Olmsted, Miss J. Lang and E. H. Craigie—

An attempt is being made to study the position of the pathways of the spinal cord that transmit various types of impulses between the memory centres of the brain and the lower motor centres of the spinal cord. Encouraging results have been secured in one animal.

Miss H. I. Eadie—

The physical constants and the general reliability of the so-called "confimeter" of Leonard Hill have been determined. The instrument is devised to measure the rate of the cooling influence of the atmosphere, with the hope that the instrument may be useful in studying the problem of ventilation. The research has been assisted by the Department of Militia and Defence and several definite and probably useful results have been obtained. These will be published shortly.

J. M. D. Olmsted—

The histological changes which occur in taste buds after cutting their nerve supply have been carefully studied with significant and perfectly definite results. The problem is important because is shows the nature of the relationship which ex-

ists between a sensory nerve ending and its nerve fibre and in no other case can this relationship be so satisfactorily worked out. A paper embodying many of the results was published during the year.

Chemistry Under Direction of Professor W. Lash Miller.

Widespread interest in chemistry due to the war is no doubt responsible for the large number of students engaged in chemical research during the past year; it seems unlikely that this condition will be permanent. Of these research students, two held appointments from the Honorary Advisory Council, thirteen were half-time assistants, and twelve were undergraduates of the fourth year in the honor departments of chemistry or chemistry and mineralogy I. In addition, six undergraduates of the fourth year in the faculty of Applied Science spent about half their time in elementary research work on electrochemical problems. The supervision of the various investigations was divided among the professors of the Department; titles and brief abstracts of the results of twenty-eight of them have been sent to the Royal Society of Canada for publication, fuller accounts of some of them will appear next winter in the chemical journals. In addition, during the year twelve papers were published from the Department, giving detailed results of work completed before the beginning of the academic year: a list of the titles may be found in appendix E,, under the title "publications of members of the staff."

Three graduate students were awarded the degree of Doctor of Philosophy, viz:— Mr. N. A. Clark, with a thesis "The influence of certain chemicals on the rate of reproduction of yeast" (Professor W. Lash Miller); Mr. W. A. Lawrance, "Nitrophthalic anhydrides and acetylamino-phthalic anhydrides with toluene and aluminium chloride." (Professor F. B. Allan); and Mr. M. E. Smith "Carbethoxy-benzoyl chlorides with aluminium chloride and various aromatic hydrocarbons" (Professor F. B. Allan).

Seven obtained the degree of Master of Arts, viz:—Mr. C. S. Gilbert, with a thesis "A study of the extent to which various liquids can be superheated and of the conditions under which superheating is possible" (Professor F. B. Kenrick); Mr. G. Haas, "Solubility of crystal faces" (Professor Kenrick); Mr. W. B. Leaf, "The action of methyl-green on yeast" (Professor. Miller); Mr. T. C. McMullen "The intermediate compounds in the reaction between phthalic anhydride benzene, and aluminium chloride, and their use in the synthesis of mixed phthalides" (Professor Allan); Mr. J. W. Rebbeck "The dissociation pressures of Spencerite, a basic phosphate of zinc" (Professor J. B. Ferguson); Mr. H. N. Stephens, "Bromphthalic anhydrides with benzene and aluminium chloride" (Professor Allan); Mr. G. A. Williams, "The passage of hydrogen and of helium through tubes of silica glass" (Professor Ferguson).

Geology Under Direction of Professor A. P. Coleman.

Between June 9th and September 18th, 1920, an investigation was made as to the thickness and extent of the Cordilleran Ice Sheet. In the course of the work twenty ascents were made to elevations of 5,000 to 10,000 feet, and it was proved that the ice rarely reached 8,000 feet and was usually much below that level. It was proved, also, that the area covered by the Cordilleran sheet was less than had been assumed hitherto.

While the results obtained threw important new light on the subject, nothing has been published, since it is hoped that much more complete data can be obtained during the coming summer.

Palaeontology, Under Direction of Professor W. A. Parks.

During the year one of the skeletons obtained by the Research Expedition of 1919 has been prepared and mounted. While the specimen does not represent a new species, it reveals several new points in the anatomy of the head, and for the first time shows the structure of part of the body. An illustrated article on the specimen has been prepared for presentation to the Royal Society of Canada.

Preparation has also been well advanced on one of the skeletons obtained by the expedition of 1920: it certainly represents a new genus and species of dinosaur which will be described next year.

The means of transportation granted from the Research Fund has enabled us to secure much material from the vicinity of Toronto which has resulted in the preparation of a monograph on the Bryozoa and Brachiopoda which will appear in the forthcoming report of the Ontario Department of Mines. The same facility of transportation has resulted in the discovery of an hitherto undescribed exposure of Utica shale on the Rouge river and has furnished material for an article on the Trilobita to be presented to the Royal Society.

A redescription of some of the Conularidae of the Lockport limestone has also been prepared for publication.

Mineralogy, Under Direction of Professor T. L. Walker.

The money available for research in the Department of Mineralogy has enabled the staff to have the assistance of Mr. E. W. Todd as a chemical assistant in mineralogical research, to secure apparatus specially needed and to conduct field work for the month of June in the triassic trap region of Nova Scotia. Thirteen papers containing the principal results of our investigations are contained in an issue of the University Studies entitled "Contributions to Canadian Mineralogy,1921." It is highly desirable that money should be provided to secure part time services of recent graduates who, while providing further relief for the staff for research, might, as graduate students, follow up their studies as candidates for higher degrees.

Department of Medicine, Under Direction of Professor Graham.

The staff of the Department of Medicine feels that, for the present at least, our main effort must be directed towards the proper training of the large number of students in attendance and the thorough clinical investigation of cases on the wards. With these ends in view, teachers' meetings have been held for the discussion of methods of teaching and the subject matter to be taught, and cases on the wards have been investigated from both the clinical and laboratory standpoint and accurate records of them have been kept. A certain amount of pure research is being carried on, the details of which are given below.

A. During the past year, Dr. A. A. Fletcher has been engaged on a metabolic study of cases of chronic arthritis. Pemberton, investigating cases of arthritis among soldiers of the American Army, found that the tolerance to glucose was frequently lowered in cases of chronic arthritis. Dr. Fletcher has attempted in his investigation to answer the following questions:—

(1) Is the lowering of the sugar tolerance an index of the severity of the disease?

2. Does the degree to which the sugar tolerance is lowered determine the suitability of such cases for dietetic treatment?

During the past 14 months the blood sugar reaction to administration of 100 grams of glucose has been estimated in over 110 cases of chronic arthritis, and in about 70 of these, the results of diet, low in carbohydrates, has been carefully observed. From this work it has been found:—

1. That the sugar tolerance in chronic arthritis shows great variations in different cases, but is remarkably constant in the individual cases, over a long period of time.

2. That the lowering of the sugar tolerance is no indication of the severity of the disease, nor does the tolerance return to normal when convalescence sets in. This is not in agreement with the conclusions of Pemberton in army cases.

3. That most cases of arthritis are favorably influenced by dietetic treatment, and that the degree and probability of benefit varies directly with the lowering of the sugar tolerance. Cases showing blood sugar figures up to 3 mgs. per cc., after 100 grams of glucose, are in our cases always much improved and sometimes cured by such treatment.

4. That female cases of arthritis show as a rule a much lower tolerance than the males, and are more frequently benefited by reduction of diet. This would indicate that in men other factors play a more important part in the production of arthritis, as for example, fatigue, exposure, etc.

5. That there is a close association between infection and sugar metabolism. Further work is indicated on this question.

6. That a simple diabetic diet alone is not suitable unless containing adequate vitamins, especially vitamin "A."

B. Careful clinical and laboratory studies were made last year on the cases of "Flu" treated in the hospital. In conjunction with the department of Pathology and Bacteriology, two important papers have been published on the Aetiology of Influenza:—

1. The Aetiology of Epidemic Influenza: Experiments in search of a Filter-Passing Virus.—H. B. Maitland, Mary L. Cowan and H. K. Detweiler.

2. Spontaneous and Artificial Pulmonary Lesions in Guinea-pigs, Rabbits and Mice.—H. B. Maitland, Mary L. Cowan and H. K. Detweiler.

C. During the past winter all cases of pneumonia have been carefully studied. Their clinical investigation is still in progress. In November Dr. Detweiler began a study on the route of infection in lobar and broncho-pneumonia. Twelve experiments were performed in attempting to throw light upon the possibility of producing experimental pneumonia by infection of the lymphatics of the upper trachea, to the exclusion of other routes. Many difficulties were encountered and the work had to be temporarily discontinued at New Year, owing to the resignation of the skilled laboratory technician and the necessity of taking over his work as well as training a successor. It may be mentioned, however, that ten of the animals showed evidence of lung infection, in a more or less degree. This investigation will be resumed as soon as time permits.

D. Studies in the Wasserman reaction during pregnancy and pneumonia are in progress.

E. During the past two years Dr. W. R. Campbell has been engaged in a clinical and laboratory study of cases with kidney disease. A publication will be made shortly on the practical application of simple methods for the diagnosis and treatment of renal disease.

F. Clinical and laboratory investigations on the following diseases are now in progress:—

(1) Exopthalmic Goitre.

(2) Diabetes Mellitus.

(3) Pneumonia.

(4) Endocarditis.

G. During the "Flu" epidemic in 1920, an attempt was made to study in co-operation with the department of Physiology, the blood flow in the hands of patients suffering from "Flu," especially those showing cyanosis. Owing to the difficulty in using the apparatus then available, Dr. Taylor, of the deparment of Physiology, has devised a new apparatus suitable for use with bed patients, Investigations using the new apparatus will be carried on this year. Financial assistance for this work is being provided by the Special Research Fund.

H. In order to obtain more accurate information of the topographical anatomy of the chest, a combined clinical and X-Ray study of the chest is being made on fifty or more normal adults. This research is being carried on with the assistance of Dr. Richards of the X-Ray department of the Toronto General Hospital. Financial assistance for this work is also being obtained from the Special Research Fund.

Sub-Department of Paediatrics (Dr. Alan Brown).

Several problems are now under investigation in the Nutritional Research Laboratory at the Hospital for Sick Children. Partly because of delay from lack of suitable material, and partly because the work involves much detail, the completion of these problems necessarily requires a considerable period of time. One in particular was begun about a year ago, and there is no prospect that it can be finished before the end of the academic year. These problems are as follows:—

(1) The retention of the fat, nitrogen and the more important salts of the diet by children suffering from chronic intestinal indigestion, and by those who are making a good recovery from the same. Two cases were studied last spring, the food, urine and feces for five and six day periods respectively, being collected and analyzed. Neither represented an extreme stage of the condition; one child being well advanced in recovery, and the other showing considerable improvement. No new case has been available until this spring, when a mild case came under observation. The material for the preliminary period has been collected, and the analyses are under way. It is hoped that material can be obtained later, after a definite recovery has taken place.

(2) Retention of the chief food elements in acrodynia—Two cases have been studied. The analyses for the second case will be completed shortly, and the work will be ready for publication before the end of the academic year. The case in which the work is finished showed nothing out of the normal in the behaviour of fat or the various salts, but showed an abnormally low nitrogen retention. The excessive loss of nitrogen occurred through the urine, though the feces, small in actual amount,contained an unusually high proportion of nitrogen.

(3) The difference between the retention of fat, nitrogen, and salts by children fed dilutions of whole milk, and that by children taking the same dilutions of whole milk powder dried by the hot spraying method, is now under way. The observation should be made on a number of different children, and the completion of the work may be delayed.

Other work has been done during this year as material has come to hand as follows:—

(1) The investigation of the fat content of the stools of an infant suffering from pyloric stenosis, just before and just after operation, to determine the proportions of split and unsplit fat as an indication of the presence or absence of the normal amount of lipase. For controls the same work was done on the stools of two infants of similar age without pyloric stenosis but suffering from diarrhoea. A much larger proportion of unsplit fat was found in the feces of the child with pyloric stenosis, than in either of the other infants. However, the work should be repeated with other cases of pyloric stenosis before any conclusions can be drawn.

2. The fat, nitrogen and salt retention of a girl suffering from epilepsy was studied. She had a good appetite and excellent digestion. She showed very good retention of fat and nitrogen, but rather peculiar salt behaviour. There was a very large retention of calcium, magnesium and phosphoric acid, but rather small of potassium, sodium and chlorine.

3. Nitrogen partition in the urine of marantic infants with mild nose and throat infections. Not enough work has been done yet. Two cases showed high urea on successive days, and two very low. The stools were not collected. It will probably be necessary to collect these in order to distinguish between cases with and those without diarrhoea.

(4) Two cases of diabetes, one an infant, were followed for a long period. Daily determination of total sugar in the urine, and for a considerable part of the time quantitative determination of acetone and diacetic acid were made.

(5) Completion of the work on calcium in the blood in tetany by Dr. R. W. Simpson in collaboration with Dr. Alan Brown.

(6) Determination of organic acids free and combined by Van Slyke's method in as many as possible of the urines of infants and children that have been collected quantitatively for any purpose. It is hoped that some instructive tabulation of results can be made when enough data have been collected.

(7) Investigation of the nature of the unidentified rest in dried feces, sometimes amounting to over 30%, not fat, protein or ash. Samples of feces left from other investigations are used. Determination of organic acids in these samples is being made. Not much time has been spent on this work yet.

The work of the Research Fellows:—

Dr. Gladys Boyd has been carrying on three problems:—

1. Study of nephritis in children from the point of view of the chemistry of the blood and the urine. This work is nearly completed and will soon be ready for publication.

2. Study of sugar tolerance of infants. Not much progress has been made in this.

3. Study of the toxins of burns. This is being done in collaboration with Dr. Bruce Robertson, Department of Surgery. Material is being obtained from animals as well as from cases of burns brought to the hospital, where exsanguination transfusion is used.

Dr. Boyd hopes during the summer to investigate the toxins of summer diarrhœas along the same lines as that in which the work on burns is being done.

Dr. A. P. Hart has just completed an investigation of the cause of the ammoniacal diaper and his paper is now ready for publication.

Dr. Hart has begun an investigation of the hemoglobin of the blood in rickets, and the change in it as a result of treatment, using the Palmer and Van Slyke methods for the determination of hemoglobin.

Dr. Hart has also collected data from all available cases on sugar tolerance in rickets.

Report of the Committee in Charge of the Fund for Experimental Research.

The Committee have had the sum of $5,000.00 available for the purposes of Research, during the session 1920-1921. The following statement indicates the manner in which the funds have been utilised for the period mentioned and includes, in addition, a report on certain uncompleted investigations which were, in part at least, financed by funds provided prior to June, 1920.

First: *Uncompleted investigations which are still in progress and were financed from funds provided prior to June,* 1920.

(1) Experiments on Basal Metabolism

Necessary apparatus was provided and the investigations are still in progress. The results will soon be available for publication. The Research is being conducted by Dr. F. W. Rolph.

(2) Research on Nipple Toxins

This recearch was conducted by Dr. Dobbin under the direction of Professor J. J. MacKenzie. The latter obtained the necessary funds for the Research from the Committee.

(3) Research on Dementia Precox

Dr. C. K. Clarke was provided with funds to the extent of $500.00 which was to be utilized as part of the salary of Miss LeDrew, who was engaged by Dr. Clarke to tabulate statistics. Dr. Clarke reports that while most useful information has been obtained it is too soon to utilise this for publication.

(4) Reasearch on Inflamation and Repairs in Tendons and Fascia

Dr. W. E. Gallie and Dr. LeMesurier are carrying on a Research to illustrate the clinical phenomena which present problems for solution in connection with inflammation and repair in tendons and fascia. The results of these investigations will be published immediately.

(5) Research on the Cellular Activity of Testes

Dr. W. E. Gallie has obtained permission of the Committee to investigate the cellular activity of the Testes after such procedures as the Bevan operation. The investigation is in progress.

(6) Research on Anaemia

Dr. N. M. Keith was granted permission to conduct a series of experiments on Anæmia. Shortly after the investigation was begun Dr. Keith was transferred to the Clinic of The Mayo Foundation, Rochester, Minnesota. The investigation will be continued by Dr. Almon Fletcher.

Second: *Investigations financed from funds available after June,* 1920.

(1) Research on Burns

Dr. L. B Robertson was granted permission to study the toxic products contained in the blood of patients the victims of severe burns. Results of value and interest have already been obtained and the Research is still in progress.

(2) Research on Infection in the Kidney

Dr. J. C. McCleland was granted permission to study the modes of infecting the Kidney. The investigation is still in progress.

(3) Research on the Effect of X-Ray Treatment Upon the Ovary

Dr. Richards and Dr. Shouldice were granted permission to investigate the effect of x-ray treatment upon the Ovary. This work is in progress.

(4) Reasearch on the Etiology of Intussusception

Dr. D. E. Robertson was granted permission to conduct experiments in order to study the method of production of an intussusception. The work is still in progress.

(5) Research in Creatinuria

On application of Professor Harding, funds were provided for Mr. O. H. Gaebler to conduct a Research on Creatinuria.

(6) Research in Psychology

Funds were provided for Dr. Bott for experimental investigations in Psychology.

(7) Research on the Normal Relations of Viscera

Drs. Detweileer and Jamieson were provided with funds for the purpose of studying the normal relations of the Viscera.

(8) Research on Peritonitis

Dr. Costain was granted permission to conduct an investigation on the etiology and treatment of Peritonitis. The work is in progress.

(9) Apparatus for Research

Dr. Armour was granted permission to purchase a Microtome of large size for the purpose of cutting sections of the Brain, to be utilized in the study of the anatomy of the Brain.

(10) Apparatus for Research

Professor Duncan Graham was provided with funds for the purpose of constructing Calorimeter moulds and Sleeves to be used in the study of the rate of the Blood Flow.

The School of Engineering Research

The progress of the School of Engineering Research during the past year, has been as great as could reasonably be expected, bearing in mind the load of lecture and laboratory teaching borne by members of the staff.

The publication of Bulletin No. 2, has unavoidably been delayed by the pressure of this latter work. However, the papers embodying the results of the investigations are now in course of preparation and will be shortly in the printer's

hands. The bulletin, it is expected, will be ready for circulation during the summer. Following are some of the subjects of investigation which have been completed and with which the bulletin will deal:—

Professor P. Gillespie:

The operation of the Imhoff Sewage Sedimentation Tank in America—The Strength of Gypsum—Slabs doubly Reinforced with Steel—An investigation of the Effect of Certain Variations in Concrete Mixtures Upon the Strength and Other Properties—in collaboration with the American Society for Testing Materials.

Professor C. R. Young:

Investigation of the True Net Section of Rivetted Tension Members.

Professor H. E. T. Haultain and Professor F. C. Dyer:

The Analysis by Photograpy of the Paths of the Balls in a Ball Mill.

Professor F. C. Dyer:

Apparatus for the Quantitative Determination of the Magnetic Contents of Ores.

Professor J. T. King:

Improvements in the Apparatus for Graphite Assay.

Professor J. H. Parkin:

The Toronto Aerodynamic Laboratory.

An Investigation of Various Types of Micromanometers. Studies with a Full Scale 4 ft. N.P.L. Type Wind Channel to Determine the Best Form of Intake to Overcome Disturbances Due to Eccentric Position in the Building, and the Presence of Large Obstructions.

Wing Tip Research—Part 1

The Effect of Plan Form and Variation in Camber.

An Investigation of the Characteristics of the Belliss and Morcom Governor.

Professor J. W. Bain:

Improvements in the Method of Production of Zirconium Oxide from its Ores.

A Study of the effect of Alteration of Conditions in the Distillation of Wood.

Professor M. C. Boswell:

Contributions to the Theory of Solution.

(1) Catalytic Reduction in Acid Solution.

(2) (With H. C. Soehner), Rates of Action of Magnesium upon Solutions of Sulphuric, Hydrochloric, and Acetic Acids of Various Concentrations.

(3) (with H. C. Soehner), Rates of Action of Magnesium upon Solutions of Potassium Chloride, Sodium Nitrate, Potassium Sulphate, Barium Chloride, and Ammonium Chloride, of various Concentrations.

(4) The Solubilities of Magnesium Hydroxide and Calcium Hydroxide in Solutions of Potassium Chloride.

(5) (with R. C. Cantelo). The Vapor Pressures of Sulphuric Acid, Potassium Chloride etc., of Gradually Increasing Concentration.

(6) (with R. C. Cantelo), The Mechanism of the Action of Nickel in Hydrogenation.

The Determination of Magnesium in the Presence of Potassium.

The Production of Oxalic Acid from Wood Waste.

A Method for the Large Scale Production of Absolute Formic Acid.

Professor H. W. Price:

The Effect of Magnetic Leakage on the Flux in the Core, the Magnetizing Current, and Core Losses in Current Transformers.

The Effect of the Position of the Primary Conductor on the Errors through Type Portable Current Transformers.

Determination of Turn-ratio of Current Transformers.

The Effect of Various kinds of Primary and Secondary Shunts on the Characteristics of Current Transformers, and Methods of Applying them to Minimize the Errors of Current Transformers Operating on Fixed Burdens.

Professor G. A. Guess:

The further Investigation of the Conditions in the Electro Refining of Nickel.

The Recovery of Silver from Zinc Retort Residues.

The Determination of the Extent to which the Desulphurization of a Copper Ore may be Carried and Still Enable a Gas to be Manufactured Sufficiently High in Sulphur Dioxide for the Production of Sulphuric Acid—a Problem of the Tennessee Copper Company.

(9) Report of the Librarian. (H. H. Langton, Esq., M.A.).

I beg to submit the following report on the Library for the year ending June 30th, 1921.

The number of volumes added to the Library during the year is 7,838; the number of pamphlets added during the year is 1,530; making a total of 168,418 bound volumes and 54,176 pamphlets in the Library.

The statistics of the use of the Library by students, with comparisons of the two previous years, are as follows:

	1918-19	1919-20	1920-21
No. of books taken out during day	26,698	41,128	41,483
No. of books taken out for the night	10,920	16,583	17,321
No. of books taken out for a week	4,360	4,589	4,687
Average number of students in Reading room at any one time	57	77	75

The use of the Library by students has remained almost stationary as compared with the previous year, but this condition is not likely to be more than temporary. Two additional Reading Rooms, formerly occupied by the University Press, have been prepared for use, and, as soon as the Library Staff can be augmented to enable them to be under supervision, they will be opened to the students. Another large room in the basement has been temporarily in the occupation of the graduate students during the latter part of the year.

The increased cost of books and periodicals in all countries necessitates a large increase in the appropriation for the Library, even without considering the demand by all University departments for more extensive purchases. If the University is to maintain its place among the Universities of Canada, especially in the matter of post-graduate work, a much larger appropriation for books and periodicals must be made in the immediate future.

The appointment of Mr. W. Stewart Wallace as Assistant Librarian at the beginning of the year has proved a very important step in improving the efficiency of the Library. The time of the Librarian has been so largely taken up with routine work and the ordinary problems of administration that very little attention could be given to new departures. The Assistant Librarian at the beginning of the year visited several of the more important University Libraries

in the United States, studying methods and bringing back with him information as to the experiments being tried in other places for the purpose of making their Libraries more interesting and helpful to undergraduates. Although want of space and funds has prevented these new ideas from being put into practice, for the present at least, they are receiving consideration and attempts will be made to carry out some of them at the earliest opportunity.

(10) Report of the Director of the Department of Social Service. (Professor J. A. Dale).

In presenting the report of my first year as Director of the Social Service Department, I have many acknowledgements to make. The University, by its foundation of a chair in Social Science, has given formal recognition of the existence of a body of organized knowledge, at once liberal and applicable to the practice of social service. It is a pleasure to record that two of the most important of recent contributions to social theory have come from my predecessor, R. M. MacIver, who has given the Department, both as Director and teacher, the tradition of sound learning, whose evidence is in his books.

The other essential to a school of social service is practice work. It would not be possible to find satisfactory clinical experience for so large a number of students, except for the generous co-operation of social agencies and their officers: and would not be easy without the existence of a group of organized agencies such as the Neighborhood Workers' Association. Miss McGregor has built up a system of field work which depends chiefly on the supervisors, and partly on the correlation of the practice with the study of case-work. To these supervisors our debt is heavy. At considerable trouble, and for no reward, they take charge of the student's work in their department, and prepare the most careful reports, which are invaluable for record and for guidance in making recommendations for employment. As the Department develops it should definitely retain the services of a certain number of supervisors by arrangement with their agencies, instead of depending (and sometimes, I fear, trespassing) on their kindness. At the same time, it is only fair to add that practically every agency whose help has been sought, has regarded it as a privilege and a duty to give practice facilities with skilled instruction. The employment of trained workers is not only the truest economy for the work's sake, but makes possible that concerted action which gives the best service to the needy and the best practice for the student. This employment of qualified workers at once raises the standard of service and of training, and attracts good students; while the employment of poorly qualified workers in all three ways depresses the standard.

Registration.

The registration of full time students was 61, which exceeded the limit we had set, and crowded our field work. The average age of these students was 27: 35 were between 20 and 30, and 4 below. The total registration was 366, of whom 18 were men. The number examined was 277; first year certificates, 39 (in addition 5 were conditioned): diplomas, 5 (2 more were conditioned). The overwhelming majority came from Ontario—outside Toronto 160, Toronto 151. There were in addition 296 registered in short courses.

Entrance.

The entrance qualification is a matter of some difficulty, and new regulations have been drawn up for next session. Briefly, these set age limits of 21

and 35, and more clearly define the academic requirements. While giving full discretion to accept applicants who can offer evidence of successful social service and sufficient general education, these regulations aim to encourage students who are still of school and college age, to take a college course if possible; if not, to take a shorter university course, with subjects selected for their preparatory value, or at least to take matriculation,—normally, the minimum standard. We are working on a university course, two years preparatory and two in the Department, which we hope will become the normal course of those students who on leaving school desire to take up social training and are unable to take either a degree or a diploma course.

Part time students were admitted to nearly all the lectures: they represented a great variety of occupation. It is evident that the function of providing teaching for citizens of all ranks who wish to make their service to the community more effective, only waits development. There are at present various difficulties; in some classes there is no room; the lectures are usually given in the morning; it is very hard to add to the teaching hours of the staff whose time is not at our disposal and is heavily occupied elsewhere.

Library.

The number of books has been steadily increased owing to the generosity of the McCormick Estate; and the use of the books has notably increased. The privilege of the library is extended to Alumni, social workers, and interested people under guarantee, and so far as the use by students permits. Brief reference must be made to the increasing enquiries for book lists, for guidance in study, or in practical work: a valuable item in our service and though rather a heavy demand on our staff, one very willingly given. It will be necessary next year to extend the library by adding to it the present office of the Field Work Director. There has been also a considerable increase of clerical work, and I wish to make special acknowledgment of the devoted service of Miss Anderson as secretary and librarian. Other thanks are due for the thoughtfulness of those friends, and the class of '21, who have made welcome gifts of books; and for the loan collection of pictures with which Professor Mavor has added charm and interest to our pleasant building. An even greater gift is the enthusiastic loyalty of the Alumni, which gives the Department the most welcome help and encouragement.

Special Courses.

1. A full course for Y. M. C. A. boys' workers, offered in co-operation with the National Boys' Work Board. Part of the work was taken in Victoria College, and the practice work in the Y.M.C.A. The course was in charge of Dr. Hayward, and will lead to a second year next session. The entrance qualifications proved a difficulty here also, and it is expected that a four year course of the type just described, will be officially adopted by the Y. M. C. A., and possibly by other bodies.

2. The Medical Social Course was modified, in order to show the perspective of medical in relation to general social work. Of the 25 lectures, 8 were given by the Director and 2 by Mr. Stapleford, the remainder by experts in various aspects of Public Health Nursing. The course was in charge of Miss Emory, and the work done very satisfactory.

3. A short course was given for the Neighborhood Workers' Association and Big Sister Association combined, on child welfare and family problems—12 lecturers taking the various aspects of which they had special knowledge.

4. The same method was adopted in the short course given by the Canadian National Council for Combating Venereal Disease on the moral, psychological, medical and educational aspects of social hygiene. Both courses were attended by audiences that strained the capacity of the large lecture hall to the limit.

5. The Director gave a course of fifteen lectures to the staff of the Y. M. C. A. Headquarters.

The increased number of classes, owing to the addition of a second year, and the increased size and use of the library has compelled us to restrict the use of the building by other agencies. But we have been able to offer some hospitality to the new Department of Public Health Nursing, which has proved a very natural and pleasant co-operation.

Public Lectures were given by the following visitors:— C. C. Carstens (who was brought to Toronto by the Child Welfare Council); J. H. T. Falk of Montreal, and E. T. Devine of New York. The lectures were appreciated and the audiences were large.

The Director has given a large number of public addresses and done an increasing amount of work for committees, and Miss McGregor has devoted much time and energy to building up, by personal and committee work with the co-operating agencies, the foundation of field work.

Practically every graduate of the Department is employed and many of this year's class leave to take up posts. For the best kind of worker, combining personality, education, experience, and trained ability, there is still more demand than supply. This will be met in course of time from the students who follow the two year Diploma course (especially from those who have good previous education and experience). But it must be realized that for many students it is very hard, or impossible, to spare an extra year; some of those who would most have profited have been compelled to go out and earn. I hope the next chapter of our history will see the foundation of scholarships, or benefaction worthy to succeed that of Mrs. Warren, which made the Department possible, and of the McCormick fund which is endowing it with a library.

(11) Report of the Director of University Extension and Publicity.

(W. J. Dunlop, Esq.)

University Publicity.

It is almost impossible to distinguish between publicity and extension work. The extension courses bring the University the very best of publicity, and the publicity work results in increased requests for extension work. Five specific means of publicity have been used:

(a) *Bulletins*:—

The following have been issued and distributed during the year:—

(1) 15,000 copies of an eight-page booklet on extension courses for teachers;

(2) 1,000 copies of a large four-page bulletin on special benefactions;

(3) 4,000 copies of a large four-page bulletin on the work of the anti-toxin laboratories, the Department of Social Service, the course in Commerce, and University Extension;

(4) 10,000 copies of an illustrated booklet containing a synopsis of the President's statement to the Royal Commission on University Finances:

(5) 3,500 copies of an eight-page booklet, illustrated, on Special Winter Course, for distribution to U. F. O. Clubs;

(6) 15,000 copies of a sixteen- page Summer Session calendar for teachers;

(7) 3,000 copies of an eight-page pamphlet giving a list of extension lectures;

(8) 1,000 copies of a four-page folder regarding outside classes under the new arrangement approved by the Senate;

(9) 5,000 copies of a sixteen-page booklet, "Opportunities for Graduates in Science," prepared by the staff in Science of the Faculty of Arts;

(10) 5,000 four-page folders regarding the Special Winter Course for farmers and 2,500 four-page folders on the Short Course in Journalism.

(b) *Meetings: addresses—*

In co-operation with the Alumni Association and with the very effective assistance of Professor C. H. C. Wright, local alumni associations were visited, re-organized, and meetings addressed. The principal places visited were:— Stratford, Niagara Falls, Welland, Brantford, Kitchener, Bradford, Ottawa, Hamilton, St. Catharines, Cornwall, Napanee, Belleville, Trenton, Oshawa, Port Hope, Cobourg, Brockville, Pembroke, Smith's Falls, Bowmanville, Dunnville, Simcoe, Galt, Guelph, Windsor, St. Thomas, Woodstock, Exeter, Harriston, Collingwood, Waterford, Chatham, Sarnia, Windsor, and Elora. Meetings were not possible in all of these places but good publicity work was done in each of them. Addresses were given by Sir Robert Falconer, General Mitchell, Professors Gillespie, McLennan, C. H. C. Wright, G. M. Wrong and I. H. Cameron, Mr C. E. Macdonald, and the Director.

(c) *News Items, Articles, Letters,—*

(1) Through the kindness of Mr. C. Lesslie Wilson, B. A., of the Wilson Publishing Co., an item on the University, its work and its needs, appears every week throughout the year on one of the inside pages of some two hundred country newspapers (printed in part by that firm). This item is supplied by the Director.

(2) Articles and news items have been supplied almost daily during the session to the reporters of the daily newspapers of Toronto.

(3) Articles and letters have been supplied occasionally to the Farmers' Sun.

(4) Almost every week a short news item has been sent to every newspaper in Ontario.

(5) Articles and news items have been supplied also to the University Monthly.

(d) *Advertising,—*

Various lectures, classes, and courses have been advertised in the daily papers with excellent results. The policy has been followed of advertising for any Department of the University any lectures, courses, or special activities, that may be arranged. For example, the conference on Physics, the Household Science special course on "Diet for Health,"

the special lectures of the Department of Social Service. When all the University's advertising is concentrated in one office, it is possible to secure much more favourable advertising rates.

(e) *Exhibit at Canadian National Exhibitions*—

In March an offer of space was made by the authorities of the Canadian National Exhibition. This offer was gratefully accepted, and arrangements are well under way to put on an exhibit at this year's Exhibition. The space allotted has been divided among the Departments of Physics, Hygiene, Astronomy, Botany, Anatomy, University Extension, and the Faculty of Applied Science.

With the assistance of the Superintendent, parties of visitors have been conducted through the University buildings. The largest of these parties was one composed of one hundred and twenty-five young men and women from the county of Peel; they learned much that was a revelation to them.

The experience of this year has shown that the people of Ontario are anxious to learn more of the activities of the Provincial University which they rightly and naturally regard as their own property.

University Extension.

(a) *Summer Session*:—

The work offered in Arts in the Summer Session of 1920 comprised second year English, French, and Physics; Third year English, French, and Political Economy; Fourth Year English, Geology and Mineralogy. The total attendance in the work of all three years was 41. Now that the Teachers' Course has been definitely organized and various misunderstandings cleared up, a much larger attendance may be anticipated; indeed, the applications in hand on the last day of the University year indicate an increase of more than one hundred per cent in attendance for the Summer Session of 1921.

The subjects offered in the summer course for degrees in Pedagogy were Educational Administration and Educational Psychology. The atttendance was 44, consisting chiefly of public school inspectors, normal school and secondary school teachers, and public school principals. Two students came from the United States, one from Alberta, one from Saskatchewan.

It should be noted that, while attendance of students from other Provinces is encouraged in the courses in Pedagogy because this is the only course of its kind attempted in Canada, the courses in Arts in the Summer Session and Teachers' Classes are restricted exclusively to students in the Province of Ontario.

(b) *Teachers' Classes*:—

For the benefit of teachers who live in Toronto or its vicinity lectures in subjects of the Teachers' Course are offered at 4.30 on certain afternoons and on Saturday forenoons. According to this scheme History, Psychology, and Science of the second year were given; History, French, and Science of the Third year; and History, Psychology, and Political Economy of the Fourth Year. Eleven public school teachers who had done all the work for the B. A. degree in this way graduated this spring. The total attendance at these Teachers' Classes during the session was 76.

In the courses in Pedagogy there are Teachers' Classes also. During the winter session Educational Administration, History of Education, and Educational Psychology were given. The number of students registered in the three subjects was 31.

(c) *Correspondence Courses*:—

While teachers within easy reach of the University are taking their work in Teachers' Classes, others who cannot attend are studying the same subjects by correspondence in preparation for the work of the Summer Session. Of these latter there were thirty-four in the Second Year and thirteen in the Third Year. To them 436 correspondence bulletins were sent and 374 exercises in answer to these bulletins were received from them.

The Extension Office also conducts correspondence courses for teachers in the subjects of the Middle School, the Upper School, and the commercial course. Teachers taking this work numbered 24, 68 and 26 respectively; bulletins sent them were 501, 832 and 356, and exercises received amounted to 161, 211 and 71. While these correspondence courses are intended to assist those who will take summer courses conducted by the Department of Education, it is also to be noted that many teachers taking Upper School subjects are in this way taking also the First Year of the Pass Course and purpose entering on the Second Year of the Teachers' Course in the near future.

(d) *Extension Lectures*:—

Single lectures and courses of lectures have been greatly in demand during this year. Courses, consisting of two or more lectures, have been given by members of the University staff in Petrolia, Hamilton, Ottawa, Tweed, Stratford, Bowmanville, Brampton, Huntsville, Brantford, Bancroft, Guelph, Orangeville, Collingwood and Welland, and single lectures have been given in Woodstock, St. Catharines, Fenwick, Orono, Toronto, Brooklin, Woodbridge, Beaverton, Listowel, Burgessville, Barrie, Watford, and Hillsburg. The total number of lectures was 53. Professors who are asked to deliver these lectures respond very heartily though the trips involve much time and some inconvenience.

(e) *Workers' Educational Association*:—

This voluntary organization of working men and women receives from the University the majority of its tutors and most of its funds. The Toronto W. E. A. conducted seven classes, in the tuition of which six members of the University staff participated and three instructors who do not belong to the staff. The enrolment in these classes was about 160. The Extension Office, with the assistance of members of the University staff, organized a W. E. A. in Hamilton with two classes in Economics. The Hamilton W. E. A. asks for four classes next winter and the members are very grateful for the assistance which the University renders their organization. The Ottawa W. E. A. has asked for three classes and arrangements have been made to comply with this request. The Trades and Labour Council of St. Catharines is considering the organization of a W. E. A.

All of these Workers' Educational Associations are independent each of the others and desire to remain so but all look to the University for support.

(f) *Tutorial Classes*:—

These are evening classes composed of persons who desire to improve their education but who are not looking for a certificate or a degree. Four such classes were conducted in Toronto and one in Streetsville. The latter was attended by young men and women belonging to the Junior Farmers' Institute and the Junior Women's Institute. The Agricultural representative in the County of Peel has asked for four such classes in that County next session.

(g) *Extra-mural Classes*:—

On the recommendation of the Committee on University Extension, the Council of the Faculty of Arts and the Senate approved a new scheme by which the work now done in the Teachers' Classes may be developed and extended so that persons in any locality in the Province may, under specific conditions, proceed to a degree by means of local evening classes. Already the Central Y. M. C. A. has begun to enrol students for this type of work and enquiries regarding it have come from Boards of Trade and other responsible organizations in Fort William, Hamilton, Sault Ste. Marie, Port Arthur, Stratford and Haileybury.

(h) *Special Winter Course for Farmers*:—

The Executive of the Canadian Weekly Newspapers Association short course of two weeks open to members of their Clubs, and others, and chose as their subjects Economics, Architecture, Public Health and Hygiene, English Literature, and Canadian History. This course was given from February 7th to 19th and was in every respect most successful. The attendance was 279; the enthusiasm of the students was extraordinary; the publicity given the course in the newspapers of the Province was most gratifying. In the type of subjects given this course is the first of its kind offered to farmers by any college or university in Canada. A similar course is offered for next year at the same time.

(i) *Short Course in Journalism*:—

The Executive of the Canadian Weekly Newspapers Association has asked for a week's course similar to that given the U. F. O. and this has been arranged for September 12th to 17th.

(j) The Department of University Extension co-operated with the Department of Household Science in advertising a free course on "Diet for Health," the attendance at which was so great that many people could not be accommodated. Another course on a more permanent basis has been arranged for next year. This office also assisted the Saturday Afternoon Lectures Committee in the season's work.

Everywhere throughout the Province there appears to be a remarkable demand for higher education and the Committee on University Extension is prepared to do everything that can be done to meet this demand. To be prepared to perform, as far as the size of its staff

and its finances will permit, any service that any section of the public may require is recognized as part of the duty of the Provincial University.

(12) Report of the Director of Department of Military Studies.
(Colonel W. R. Lang).

I have the honour to report on this Department as follows:

1. The number in attendance—students in honour graduating departments and of the pass course—was 45, as compared with 15 in 1919-20, and many wishing to attend have been unable to do so owing to clashes with other subjects. In addition to these students of Military Studies as an Arts option, 47 others took practical work in the O.T.C. as an athletic option. A much increased number of applicants is indicated for next session.

2. In April eight candidates from the senior year took the optional examinations conducted by the War Office for O.T.C. certificates. The papers were those being written on by candidates throughout the Empire.

3. Proposals regarding further development of the courses are not included in this report, as these depend largely on certain changes at present under the consideration of the Medical and Science Faculties.

4. In September accommodation was provided for the department at 184 College Street. This has sufficed for the year's requirements. At my request the Militia Department kindly loaned tables, forms, chairs, maps and other instructional material.

One graduate generously sent a cheque which enabled 48 volumes to be purchased for a departmental library, and other volumes have been presented.

(13) Report of the Physical Director.
(Dr. J. W. Barton).

(A)

The last year, 1920-1921, was the second year of compulsory physical examination of all students and compulsory physical training for the students of the first and second years. With the exception of a part of the students of the final years in Medicine and Dentistry the examinations were completed and revealed some interesting facts.

First, eighty per cent of our students were in Category "A" physically, that is fit for service anywhere, another ten per cent fit only for certain kinds of service overseas, and another ten per cent fit only for light clerical service in Canada.

Students were placed in Category "C" for the following reasons: asthma, small chest, loose cartilage, deformities, goitre, hernia, injuries, infantile paralysis, light weight, deficient muscular heart, organic heart disease, spinal curvature, round shoulders, and muscular tremor.

Students in Categories "A" and "B" were allowed to choose the form of exercise in which they wished to indulge, but the students in "C" took regular class work in the gymnasium two periods each week. The results of the regular class work upon these students below par are most satisfactory.

For instance, of the students of light weight ninety per cent increased, on the average, six pounds during the session, while the other ten per cent lost, on the average, two pounds each. As the average weight of these students was one hundred and eleven pounds in October, an average gain of six pounds is a good showing.

Likewise the students with "small chests" made a creditable showing, as they all, with but one exception, increased the girth of their chest an average of 1.15 inches. The average size of these small chests (anything below 35 inches expanded) was 33.7 inches. Thus by increasing their girth as above the average size was brought up to 34.8 inches, or very close to the 35 inches.

Similar improvement was noted in cases of round and uneven shoulders and poor posture.

In the rarer conditions there were six cases of goitre, of which one decreased in size, three remained stationary, and two showed an increase.

There were five cases with a history of tuberculosis, of which four showed an increase in weight and one remained the same.

The general result was such that thirty-three per cent improved sufficiently to leave Category "C" and be placed in Category "A" or "B."

The elective work such as boxing, fencing, wrestling, basketball and swimming crowded the five gymnasia and the swimming tank daily from 4 to 6 p.m.

As many as seven hundred students have used this equipment between the hours of 3 to 6 p.m.

The new arrangement of the University whereby provision on the various time tables has been made for morning hours for physical training will be a great boon to the general athletic work.

I believe a word in recognition of the work of our swimming instructor Mr. Winterburn, is due at this time. The actual number taught to swim last year was two hundred and twenty-three. This is a record for our work.

Of those able to swim there were one hundred and fifty-eight awards for Life Saving gained by our students, which I believe is another record. It should be a great source of satisfaction to the University to know that this important work, learning to swim, and learning the art of life saving, is receiving such attention and attaining such results.

Report of the Athletic Association.

In the various branches of athletics the season of 1920-1921 has been a memorable one in the University of Toronto. It is safe to say that in no previous year have so many championships come to the University.

In the Intercollegiate contests the Senior and Intermediate Rugby, the Senior Soccer, Harrier, Basketball, Hockey, the Gymnasium Contest, the Boxing, Fencing and Wrestling championships came to Varsity.

The Senior Rugby Club also played off for the Canadian Championship, represented by the Earl Grey Cup. The Senior Hockey Club won the John Ross Robertson Cup of the Ontario Hockey Association and the Allan Cup of the Canadian Amateur Hockey Association.

In rowing, Coach T. R. Loudon's crew, many of whom had never sat in a boat before turning out for the University, won the Junior and Senior "Eights" at the Canadian Henley Regatta held at St. Catharines on Civic Holiday 1920.

The Interfaculty championships have been won as follows:

Rugby (Mulock Cup).....Victoria
Track (Toronto Cricket Club Cup).....S.P.S.
Soccer (Arts Faculty Cup).....S.P.S.
Harrier (Brotherton Cup).....Meds.
Hockey (Jennings Cup).....Trinity
Basketball (Sifton Cup).....Jr.U. C.

Boxing, Wrestling and Fencing (Davidson Cup).....Dents.
Rowing .....S.P.S.
Indoor Baseball (Spalding Cup) .....Trinity.
Swimming (Fitzgerald Cup).....S.P.S.
Water Polo .....Dents.
Indoor Track .....S.P.S.

(14) Report of the Director of the Connaught Antitoxin Laboratories. (Dr. J. G. Fitzgerald).

Research Division:

The work in this Division of the Laboratories has been undertaken with a view of further increasing the knowledge of two subjects of very considerable interest. The first problem is of immediate practical importance and is an endeavour to ascertain the diagnostic and prognostic value of certain serological methods, in tuberculosis, when the results of these serological investigations are correlated with radiological, clinical and other observations. Repeated examinations of this character have been made and already most interesting results have been obtained. Dr. Caulfeild and his associates, Dr. Hodge, Miss Cohen, Miss McLennan, Miss McMillan and Mrs. La Rush have devoted their attention to the various aspects of this work. An interesting bacteriological study in connection with this problem has also been conducted by Dr. Hodge and Miss Cohen.

The study of Dr. Caulfeild and those associated with him, has been carried to the point where publication of results will soon be undertaken and a monograph on the subject will, it is expected, be prepared. This very fine combined laboratory and clinical investigation is the result of the co-operation of the Connaught Antitoxin Laboratories with the Department of Soldiers' Civil Re-establishment, originally undertaken to provide laboratory facilities of the very best type for the ex-service men of the C. E. F. suffering from pulmonary disease. This combined effort is being sustained and is under Dr. Caulfeild's direction.

The other work undertaken by Dr. Cruikshank in these laboratories for the D. S. C. R. was discontinued when Dr. Cruikshank resigned to become Director of the Division of Laboratories of the Department of Public Health, Toronto. This work was of routine character, chiefly, and could well be carried on in the health diagnostic laboratories in Toronto and elsewhere.

The second problem at present being investigated in these laboratories is that of toxin production by bacteria. This is also a subject of much scientific interest. It has not hitherto, been approached, however, from a stand-point which to us, it has seemed, might yield significant results. The work at present is engaging the attention of Mr. Moloney and Miss Hanna and already substantial progress has been made. It is anticipated, however, that this study may require to be prosecuted for perhaps several years, before any of the more obscure features can be elucidated. Other problems, the investigation of which has been initiated by members of the Department but temporarily put aside on account of the pressure of routine work, will it is expected be further investigated during the coming academic year. The research work of members of the Departments of Hygiene and Preventive Medicine, as well as that of the members of the Research Division of the Connaught Antitoxin Laboratories is conducted in the latter because of the unusual facilities there provided.

Antitoxin Division:

The work of this Division under the immediate direction of Dr. R. D. Defries, Associate Director of the Laboratories, has expanded very greatly during the present year.

The demand for certain of the public health biological products, especially diphtheria antitoxin and smallpox vaccine has exceeded that of any previous year since the establishment of the Laboratories. The communities served have also increased in number and extent in 1920-1921,

As hitherto, all of the diphtheria antitoxin, smallpox vaccine and other products distributed free in Ontario, by the Provincial Board of Health of this Province, and in Saskatchewan by the Bureau of Public Health of that Province, have been obtained from these Laboratories. The Provinces of Alberta, Manitoba, New Brunswick, Nova Scotia and Prince Edward Island have also been supplied in large part. In addition the Cities of Edmonton, Calgary, Saskatoon, Winnipeg, Lethbridge, etc., have obtained antitoxin from the Connaught Antitoxin Laboratories. Druggists in the Provinces of British Columbia, Quebec, Manitoba, Nova Scotia and Prince Edward Island have also been supplied. The Colony of Newfoundland has obtained large quantities of different products during the year.

Other parts of the British Empire, notably, New Zealand, British West Indies and British Honduras have also obtained sera on various occasions during the present year. For the first time, products have been shipped to a City in the United States during the last six months, for use in the local health department there. China, too, is now included in the list of countries to which antitoxin has been sent during 1920-1921.

The Laboratories and University Farm were visited during the year by an Officer of the United States Public Health Service and inspected in accordance with the terms of the license held by the laboratories, and issued by the Treasury Department of the United States permitting the Connaught Antitoxin Laboratories to engage in interstate commerce in the United States public health biological products.

An approximate idea of the growth of a part of the routine work will be seen by reference to the following table indicating the output of diphtheria antitoxin for the years 1916, 1917, 1918, 1919, 1920 and 1921.

Year	Diphtheria Antitoxin Units	Diphtheria Plasma Concentrated Litres.
1916	218,626,000	
1917	304,576,000	1.425
1918	275.015,000	1.718
1919	375,215,000	2,263
1920	432,236,000	2.331
1921	496,912,000	3.847

The quantity of smallpox vaccine distributed in 1920 was 535 580 capillary tubes.

The increase in production of diphtheria antitoxin during the year has amounted to seventy per cent. over 1919-1920.

The products at present being prepared and distributed are:—diphtheria and tetanus antitoxin, anti-meningitis serum, type 1, anti-pneumococcus serum, normal horse serum, smallpox vaccine, anti-rabies vaccine (Pasteur Treatment) and anti-typhoid vaccine.

The Connaught Antitoxin Laboratories Research Fund, has been definitely recognized as a trust fund during the current year and the income on this is available for the support of research in preventive medicine, in addition to grants from other sources.

From the surplus on operating of the Antitoxin Division of the Connaught Antitoxin Laboratories for 1920-1921, a sum of money has been set aside for the purpose of promoting health education among students in various faculties in the University for a two year period. To do this a special Lecturer in Health Education (Dr. George D. Porter) has been appointed. He will direct and supervise a thorough investigation into the health conditions existing among incoming male students and will also deliver courses of lectures on elementary personal and public hygiene to students in the different faculties. This health educational work will probably be extended to include work under the auspices of the Department of University Extension.

It is hoped that as a result of this investigation and demonstration that the creation of a Department of University Health Service may be undertaken. The promotion of sound health habits should be the first result of this effort. Even more important, however, would be the creation of a sound public opinion, among undergraduates of the University, on questions relating to public health and hygiene. Later, they in turn can do much to stimulate interest in their own communities, in problems of hygiene and sanitation which may require solution. Until the public generally is educated further in hygiene and sanitation, improvements in the general health are likely to be retarded. It is especially important therefore, that a proper knowledge be inculcated into those who in many instances are destined to take leading parts in the affairs of this Dominion.

The loyal and enthusiastic co-operation of all members of both Divisions of these laboratories is gratefully acknowledged.

(15) Report of the Department of Public Health Nursing.

(Miss E. Kathleen Russell).

I beg to submit the following report from this Department for the year ending June 30, 1921.

When the Department of Public Health Nursing issued its first announcement in July, 1920, considerable interest was manifested by the nurses in Ontario and elsewhere, and we were able to select a full class of 50 students, from a list of about 80 applicants. Of this class of fifty, 47 received Diplomas.

The curriculum has presented problems which only experience will solve. We have a certain type of worker to prepare, namely the Public Health Nurse, but that is a rather general term which to different Public Health administrators suggest various forms of service. We are asked to give these students in a one year course, the training and general viewpoint which will enable each to adapt herself later to any branch of this work. It is only possible to attempt this for women who are already graduate nurses.

It has been comparatively easy to obtain the lecture courses desired for this class. The University has a rich store from which to draw. That fact seems to justify the establishment of this new Department in the University.

The health organizations of the City of Toronto constitute the laboratory in which these students must receive their practical training. The difficulties of planning and controlling such work are evident, but, nevertheless, we felt that

satisfactory results were obtained. We are deeply indebted to the public health organizations of the city for that training freely given to our students.

The Red Cross Society has generously met the entire cost of the year's work, and we have the promise of their financial assistance for two more years, so that the University may have time to make plans for the future support of the Department.

It is already evident that we are preparing a type of worker that is really wanted in the community, for we are receiving many demands for the services of these first graduates. These enquiries are coming from all over Canada.

(16) Statement Regarding the Biological Museum.

(Professor B. A. Bensley)

The following donations have been received for the Biological Museum and for the Royal Ontario Museum of Zoology:—

A collection of shells from Mr. J. J. Freeborn, Dundas, Ontario.

Specimens of antelope horns, presented by Mrs. Davids, Toronto.

A collection of 133 mounted birds, property of the late Dr. T. H. Thornton, Consecon, Ont.; presented by Dr. F. B. Thornton, Toronto, and Mrs I. H. Woods, Petrolea.

A grey seal from Mrs. Turry, Toronto.

A young whistling swan from Mr. G. L. Vivian, Toronto.

An American bittern from Mr. Ernest Purvey, Toronto.

Specimens of pheasants, young peafowl and weasel, presented by Mr. G. H. Corsan, University of Toronto.

A flying squirrel from Mr. J. T. Burnham, Toronto.

A large number of specimens, chiefly birds, including a male ostrich, presented by the City of Toronto Parks Departments.

The following specimens have been received as loans:—

A passenger pigeon from Mr. Paul Hahn, Toronto.

A collection of mounted birds and mammal trophies from Dr. H. H. Moorhouse, Toronto.

There has been received by purchase at a nominal figure the extensive collection of insects belonging to Dr. C. J. S. Bethune, late of Ontario Agricultural College, Guelph.

(17) Statement Regarding the Museum of Geology. (Professor A. P. Coleman).

Besides the acquisition of material as listed below there is nothing worthy of especial mention except the installation of a new wall-case. Professor Parks spent three weeks of the summer of 1920 on a collecting trip to the iron and copper regions of Michigan.

The chief acquisitions during the year are as follows:—

By Donation:

Lava, sulphur, Pele's hair from Mt. Kilauea, Hawaii.—W. Covert, Esq., Toronto.

Sphalerite from Joplin, Missouri.—Professor Guess.

Copper Ores from Japan.—Kenzo Ikeda, Japan, per Dr. W. G. Miller.

Post-glacial volcanic ash, Minto, Yukon.—Professor Walker.

Nigerian tin.—G. T. Halloway, Esq., London.

Calcite concretionary on roots, France.—A. L. Benness, Esq., Swansea.
Semi-anthracite, Alberta.—Mr. Reeve, per Professor MacLean.
Calcite, apatite and mica.—Mrs. R. Galley, Toronto.
Travertine, Moore Park ravine.—Mr. Arthur Jennings, Toronto.
Large series of nickel and copper products,—Mond Nickel Company.
Series of asbestos products.—Consolidated Asbestos Company, Montreal, per Professor Walker.

By Purchase:

Samarskite, North Carolina; Quartz sphere. Japan.—Dr. W. F. Ferrier.

By Collection:

Complete series of copper ores and related rocks, Keweenaw Point, Michigan. —Professor Parks.
Complete series of ores, rocks, etc, of the Marquette Iron Range, Michigan —Professor Parks.

(18) Statement Regarding the Museum of Palaeontology. (Professor W. A. Parks).

During the winter the head and part of the trunk and limbs of a very fine specimen of *Centrosaurus apertus* have been prepared and mounted in the gallery. Much of the work of preparation has also been done on the head and skeleton of a remarkable new genus and species of dinosaur obtained by the "Research" expedition of 1920.

During the summer and autumn of 1920 very large collections of local fossils were made and much material obtained by donation and purchase has been added to the gallery.

By Donation:

The chief acquisitions during the year are as follows:—
Tertiary fossils from Peru.—J. V. Culbert, Esq.
Type fossils from Idaho, Wyoming, and Utah.—Dr. W. F. Ferrier, Toronto.
Mastodon bone, Florida.—Mrs. C. E. Humberstone, Toronto.
Fossil corals, Lake of the Woods.—A. K. Shives, Esq., per Professor Thomson.
Carboniferous fossils, Nova Scotia.—A. K. Shives, Esq., per Professor Thomson.
Trenton Bryozoa, Montreal.—Professor Thomson.
Megalomus canadensis, Galt, Ontario.—J. Capling, Esq.
Actinoceras sp.—Mr. Wallbridge.
Fossils from France.—A. L. Benness, Esq., Swansea.
Fossils from the Triassic of Peace river.—A. H. Bell, B.A.
Fossils from the Devonian of Great Slave lake.—P. S. Warren, B.A.

By Collection :

Local fossils, Toronto.—Professor Parks and assistants.
Dinosaur remains, Red Deer river, Alberta.—Professor Parks.
Fossils from British Columbia.—Professor Coleman.

By Purchase :

Type specimen of Lissoprion ferrieri.—Dr. W. F. Ferrier, Toronto.
Palaeozoic invertebrates.—Ward's Natural Science Establishment, Rochester, N. Y.

(19) Statement Regarding the Mineralogical Museum.

(Professor T. L. Walker).

During the year the collections of the University and of the Royal Ontario Museum of Mineralogy have been materially enriched by numerous donations and exchanges as well as by the personal field work of the staff.

The outstanding presentation is due to the generosity of Hon. Senator M.J. O'Brien, Renfrew, Ontario, who gave one of the rich specimens from the Miller Lake-O'Brien mine of Gowganda, Ontario, showing a vein twenty-two inches wide richly impregnated with silver in the smaltite gangue. This specimen now occupies a case in a prominent position where all visitors may gather an idea of the character of the ore in the Gowganda district.

A valuable collection of Brazilian minerals was presented by the Geological Survey of Brazil.

An unusually fine collection of Swedish minerals was received in exchange from the Riksmuseets Mineralogiska Afdelning, Stockholm. In this collection are exceptionally fine samples of some of the rarer Swedish minerals.

Several gaps in the systematic collection were filled by an exchange with the British Museum.

With a view to furthering exchange it has for several years been the policy of the Museum, as opportunity offered, to secure large quantities of typical Canadian minerals, principally through the efforts of the members of the University and Museum staff. As a result of this policy many minerals which were not represented in the collection have been obtained in exchange and for completeness the collection compares favorably with the prominent museums not only on this continent but in Europe.

APPENDIX B

(1) Enrolment in the Colleges.
(2) Enrolment in University subjects.
(3) Registration in Courses in the Faculty of Arts.
(4) Registration for Graduate Courses.

(1) Enrolment in the Colleges.

The students in University College were enrolled as follows:

——	Greek.	Latin.	Ancient History.	English.	German.	French.	Orientals.	Ethics.
First Year—								
Pass	15	305	128	369	78	298	108	.....
Honours	10	21	33	96	20	85	.....	.....
Second Year:								
Pass	9	38	.....	235	9	162	79	.....
Honours	7	6	39	53	8	41	4	.....
Third Year—								
Pass	3	7	3	115	8	64	38	46
Honours	10	11	8	38	2	26	1	.....
Fourth Year—								
Pass	.....	10	11	91	15	51	36	36
Honours	5	4	5	30	7	15	.....	.....
Totals—								
Pass	27	360	142	810	110	575	261	82
Honours	32	42	85	217	37	167	5	.....

The students in Victoria College were enrolled as follows:

	Greek.	Latin.	Ancient History.	English.	German.	French.	Orientals.	Ethics.
First Year:—								
Pass	6	95	29	87	10	83	14	.....
Honours	3	5	21	56	17	42	.....	5
Second Year—								
Pass	2	23	.....	86	5	65	7	.....
Honours	5	11	15	31	12	21	3	2
Third Year—								
Pass	1	1	2	50	8	14	2	33
Honours	4	1	1	12	3	8	.....	4
Fourth Year—								
Pass	1	3	8	59	6	21	2	20
Honours	3	3	3	12	5	6	1	4
Totals—								
Pass	10	122	39	282	29	183	25	53
Honours	15	20	40	111	37	77	4	15

The students in Trinity College were enrolled as follows:

	Greek.	Latin.	Ancient History.	English.	German.	French.	Orientals.	Ethics.
First Year—								
Pass	1	30	3	29	3	26	1	.....
Honours	6	7	6	8	1	4	.....	.....
Second Year.—								
Pass	3	21	.....	27	1	19	2	.....
Honours	3	3	.....	6	3	4	.....	.....
Third Year:—								
Pass	1	2	.....	14	.....	10	1	13
Honours	2	1	1	4	2	3	.....	4
Fourth Year—								
Pass	.....	2	2	8	3	3	1	5
Honours	3	3	3	2	.....	3	.....	.....
Totals—								
Pass	5	55	5	78	7	58	5	18
Honours	14	14	10	20	6	14	.....	4

The students in St. Michael's College were enrolled as follows:

	Greek.	Latin.	Ancient History.	English.	German.	French.	Orientals.	Ethics.
First Year—								
Pass	4	69	7	78	7	66	.....	.....
Honours	3	3	7	15	4	14	.....	.....
Second Year—								
Pass	.....	25	.....	48	2	27	25	.....
Honours	1	1	1	6	1	6	6	6
Third Year—								
Pass	.....	5	.....	30	1	19	7	20
Honours	.....	1	.....	3	2	3	8	8
Fourth Year—								
Pass	1	1	.....	19	.....	11	14	18
Honours	1	1	1	3	.....	4	.....	.....
Totals—								
Pass	5	100	7	175	10	123	46	38
Honours	5	6	9	27	7	27	14	14

(2) Enrolment in University Subjects.

The following tables exhibit the numbers attending lectures in University subjects, together with the number of those taking the practical work in the laboratories:—

DEPARTMENT OF MATHEMATICS

	Pass.	Pass and Honours.	Honours.
Faculty of Arts—			
First Year	592	.....	71
Second Year	22	.....	139
Third Year	2	.....	45
Fourth Year	.....	.....	15
Faculty of Medicine—			
First Year	17	.....	.....
Second Year	9	.....	.....
Faculty of Applied Science—			
First Year	.....	191	.....
Second Year	.....	316	.....
Total	642	507	207

DEPARTMENT OF PHYSICS

	Pass.	Pass and Honours.	Honours.	Laboratory.
Faculty of Arts—				
First Year	459	.....	76	76
Second Year	12	.....	81	71
Third Year	5	.....	23	28
Fourth Year	1	.....	22	10
Graduate Students	.....	.....	9	9
Faculty of Medicine—				
First Year	.....	208	.....	208
Second Year	.....	14	.....	14
Faculty of Forestry—				
First Year	19	.....	.....	19
Faculty of Household Science—				
First Year		.....	.....	12
Ontario Veterinary College Students	25	.....	.....	25
Total	533	222	211	472

DEPARTMENT OF BIOLOGY

	Pass.	Pass and Honours.	Honours.	Laboratory.
Faculty of Arts—				
First Year	403		87	87
Second Year	30		52	82
Third Year	12		21	33
Fourth Year			7	7
Teachers' Class	34			34
Graduate Students				4
Faculty of Medicine—				
First Year		208		208
Second Year		326		326
Faculty of Applied Science—				
First Year				
Second Year				
Faculty of Forestry—				
First Year			17	17
Fourth Year			6	6
Total	479	534	190	804

DEPARTMENT OF BOTANY

——	Pass.	Pass and Honours.	Honours.	Laboratory.
Faculty of Arts—				
First Year	450		65	65
Second Year	24		29	53
Third Year	4		5	9
Fourth Year	5		3	8
Graduate Students			15	15
Faculty of Applied Science		32		32
Faculty of Forestry—				
First Year		19		19
Fourth Year		6		6
Ontario Veterinary College—				
First Year		25		25
Second Year		32		32
Total	483	114	117	264

DEPARTMENT OF CHEMISTRY

	Pass.	Pass and Honours.	Honours.	Laboratory.
Faculty of Arts—				
First Year	385	.....	91	91
Second Year	23	.....	79	102
Third Year	17	.....	15	15
Fourth Year	3	.....	18	16
Graduate Students	.....	.....	20	15
Faculty of Medicine—				
First Year	.....	213	.....	213
Second Year	.....	135	.....	135
Faculty of Applied Science—				
First Year	.....	.....	.....	31
Second Year	.....	76	.....	76
Third Year	.....	81	.....	81
Fourth Year	.....	9	.....	9
Faculty of Forestry—				
First Year	18	.....	.....	18
Second Year	16	.....	.....	.....
Ontario Veterinary College Students	25	.....	.....	25
Total	487	514	223	827

DEPARTMENT OF PHYSIOLOGY

——	Pass.	Honours.	Laboratory.
Faculty of Arts—			
Third Year	2	14	16
Fourth Year	11	11	11
Graduate Students	1	.....	1
Faculty of Medicine—			
Second Year	16	.....	16
Third Year	178	.....	178
Ontario Veterinary College Students	10	.....	10
Total	377	25	377

DEPARTMENT OF BIOCHEMISTRY

	Pass and Honours.	Honours.	Laboratory.
Faculty of Arts—			
Third Year	18	28	14
Fourth Year	.....	13	11
Graduate Students	.....	6	6
Faculty of Medicine—			
Second Year	197	.....	197
Graduate Students	.....	5	.....
Ontario Veterinary College Students	32	.....	32
Total	247	52	260

DEPARTMENT OF GEOLOGY

——	Pass.	Pass and Honours.	Honours.	Laboratory.
Faculty of Arts—				
First Year	425	.....	51	.....
Second Year	23	.....	14	14
Third Year	9	.....	7	14
Fourth Year	2	.....	3	4
Graduate Students	.....	.....	4	4
Third Year, Summer Session	12	.....	.....	12
Faculty of Applied Science—				
First Year	.....	12	.....	12
Second Year	.....	24	.....	.....
Third Year	.....	45	.....	14
Fourth Year	.....	49	.....	12
Faculty of Forestry—				
Second Year	.....	14	.....	.....
Third Year	.....	12	.....	12
Total	471	156	79	98

DEPARTMENT OF MINERALOGY

——	Pass.	Pass and Honours.	Honours.	Laboratory.
Faculty of Arts—				
Second Year	25	.....	27	52
Third Year	.....	.....	16	8
Fourth Year	2	.....	12	14
Summer Session	11	.....	.....	11
Graduate Students	.....	.....	.....	3
Faculty of Applied Science—				
First Year	.....	45	.....	45
Second Year	.....	83	.....	83
Third Year	.....	16	.....	16
Fourth Year	.....	12	.....	12
Faculty of Forestry—				
Second Year	.....	16	.....	16
Total	38	172	55	260

DEPARTMENT OF PHILOSOPHY

		History of Philosophy and Metaphysics		Logic		Ethics.	
		Pass.	Hon-ours.	Pass.	Hon-ours.	Pass.	Pon-ours.
First Year	.....	.....	.....	.....	.....	.....	7
Second Year	.....	.....	27	85	25	.....	7
Third Year	.....	51	10	.....	9	62	6
Fourth Year	.....	35	1	.....	1	37	1
Graduate Students	22	.....	.....	.....	.....	.....	.....
Total	22	86	38	85	35	99	21

DEPARTMENT OF POLITICAL SCIENCE

——	Pass.	Honours.
Faculty of Arts—		
Department of Political Science—		
First Year	.....	16
Second Year	120	52
Third Year	61	46
Fourth Year	101	34
Graduate Students	.....	13
Department of Commerce and Finance—		
First Year	.....	27
Second Year	.....	14
Third Year	.....	10
Fourth Year	.....	3
Department of Modern History—		
Second Year	.....	3
Third Year	.....	8
Fourth Year	.....	10
Department of Philosophy—		
Third Year	18	.....
Department of Household Science—		
Fourth Year	22	.....
Department of Social Service—		
First Year	58	.....
Department of English and History—		
Second Year	27	.....
Faculty of Applied Science—		
Second Year	316	.....
Faculty of Medicine—		
Second Year	70	.....
Department of Commerce—(New Commerce Course)—		
First Year	.....	21
Occasional Students	2	8
Totals	795	265

DEPARTMENT OF HISTORY

——	Pass.	Honours.
First Year	10	60
Second Year	90	100
Third Year	70	75
Fourth Year	81	57
Total	292	251

DEPARTMENT OF ITALIAN AND SPANISH

——	Italian.		Spanish.	
	Pass.	Honours.	Pass.	Honours.
First Year	9	7	142	79
Second Year	17	2	48	42
Third Year	2	.....	13	11
Fourth Year	.....	2	4	5
Graduate Students	.....	1	.....	2
Total	38	12	207	139

DEPARTMENT OF HOUSEHOLD SCIENCE

——	Pass. Course.	Household Science Course.	Total.
Faculty of Arts—			
First Year	.....	13	13
Second Year	.....	21	21
Third Year	7	19	26
Fourth Year	10	26	36
Graduate Students	.....	.....	2
Department of Public Health Nursing—			
Regular	.....	.....	50
Occasional	.....	.....	2
Ontario College of Education—			
Household Science Course	.....	.....	14
Summer Session	.....	.....	83
	17	79	247

(3) Registration in Courses in the Faculty of Arts, 1920-1921.

Courses	First Year				Second Year				Third Year				Fourth Year				Totals
	U. C.	V. C.	T. C.	M. C.	U. C.	V. C.	T. C.	M. C.	U. C.	V. C.	T. C.	M. C.	U. C.	V. C.	T. C.	M. C.	
Pass	290	89	29	66	121	48	27	28	64	22	11	23	59	37	6	17	937
Household Science (G. C.)													12	6	1	1	20
Classics		2	4	1	2	2	2	1	8	1	1	1	3	2	3	1	34
Greek and Hebrew					1												1
Orientals					3	3								1			7
Orientals (Greek)									1								1
French, Greek and Latin	1	1	1														3
Moderns	38	22	1	6	30	16	2	5	18	6	2	3	13	6	1	5	174
English and History (Cl.)									3	3	2		1	1			10
English and History (Mod.)									9	3	1	1	8	1			23
English and History	19	7	3	6	8	9	3	1									56
Modern History	2		1	1	1	1		1	3	4			6	3	1		24
Political Science	21				35	13	3	1	29	13	3		18	15			151
Commerce and Finance	22	12	1		12	3			8	2			3				63
Philosophy					4	2		7	2	4	4	8	1	2			34
Philosophy, English and History	4	3		1	11	8	3										30
Mathematics and Physics	11	9			15	9			10	4	1		16	3			78
Natural and Physical Science	32	19	3	1													55
Physics													1				1
Biology					4				4				1	2			11
Physiology and Biochemistry														1			1
Biological and Physical Science										1			3	1			5
Physiological and Biochemical Science									11	3			5	1			20
Biological and Medical Science					13	7	2	1	1								24
Chemistry and Mineralogy					6	1			4	2			4	3			20
Chemistry					15	1		1	4	2	2		9	2			36
Geology and Mineralogy														1			1
Household Science					2	1				2			2		2		9
Household Economics	3	8			9	9			9	8			1				47
Science for Teachers					1	3			1	1			1				7
Arts and Forestry	1												1				2
Commerce	16	6	1	2													25
Total of Courses	460	178	44	84	293	136	42	46	189	81	27	36	168	88	14	24	1,910
Total of students	457	178	44	84	293	136	42	46	189	81	27	36	168	88	14	24	1,907

(4) Registration for Graduate Courses.

Faculty of Arts:

	M.A.	Ph.D.	Graduate
Department of Astronomy	2	....	....
" Biochemistry	2	....	....
" Biology	....	3	....
" Botany	4	7	1
" Chemistry	8	6	1
" Classics	6	....	....
" Educational Theory	16	....	....
" English	12	....	4
" Food Chemistry	2	....	....
" Geology and Palæontology	1	1	1
" German	....	....	1
" History	8	....	1
" Household Science	1	....	1
" Mathematics	1	1	....
" Mineralogy	1	....	....
" Oriental Languages	2	1	1
" Pathological Chemistry	....	1	....
" Philosophy	14	3	7
" Physics	5	5	1
" Physiology	4	....	....
" Political Science	3	4	5
" Romance Languages	7	1	1
" Zymology	2	....	....
Miscellaneous	....	1	....
	101	34	25

Faculty of Medicine:

M.D.
3
3

? APPENDIX C

Results of Examinations.

(1) Faculty of Arts
(2) Faculty of Medicine.
(3) Faculty of Applied Science and Engineering.
(4) Faculty of Forestry.
(5) Faculty of Education.
(6) Faculty of Music.

(1) Faculty of Arts.

Senior Matriculation

Courses	University of Toronto	Univ. Coll.	Vic. Coll.	Trin. Coll.	St. M. Coll.	Totals	Passed	Starred	Failed.	Transferred	Aegrotat.	Deferred.	Debarred.
Pass	....	67	32	11	30	140	33	38	69	....	....	....	34
Supplementals	....	....	1	....	1	2	1	1	....	....	....	....	....
Moderns	....	2	....	....	....	2	1	1	....	....	....	....	....
English and History	....	1	....	....	....	1	1	....	....	1	....	....	....
Political Science	....	1	....	....	....	1	....	1	....	1	....	....	....
Phil., English and History	....	1	1	....	....	2	1	1	....	1	....	....	1
Commerce and Finance	....	1	3	....	....	4	2	2	....	2	....	....	1
Mathematics and Physics	....	....	2	....	....	2	....	1	1	1	....	....	1
Natural and Physical Sciences	....	5	2	....	....	7	3	4	....	4	....	1	2
Household Economics	....	....	2	....	....	2	2	....	....	....	....	....	....
Commerce	....	....	1	....	....	1	....	....	1	....	....	....	....
Totals	....	78	44	11	31	164	44	49	71	10	....	1	39

First Year

Courses	University of Toronto	Univ. Coll.	Vic. Coll.	Trin. Coll.	St. M. Coll.	Totals.	Passed.	Starred.	Failed.	Transferred.	Aegrotat.	Deferred.	Debarred.
Pass	....	184	46	17	42	289	96	102	91	....	4	....	23
Supplementals	....	39	21	10	8	78	25	....	53	....	....	....	....
Classics	....	....	2	4	1	7	5	2	....	1	....	....	....
Moderns	....	33	20	1	5	59	50	9	....	13	2	1	1
English and History	....	18	6	4	5	33	29	4	....	7	1	....	1
Modern History	....	2	....	....	....	2	2	....	....	....	....	....	....
Political Science	....	18	....	....	....	18	11	7	....	11	....	....	1
Phil., English and History	....	5	3	....	....	8	6	2	....	2	....	....	....
Commerce and Finance	....	17	7	2	....	26	17	8	1	8	....	....	2
Mathematics and Physics	....	11	8	1	....	20	17	3	....	4	1	1	2
Natural and Physical Science	..	26	12	2	1	41	33	7	1	8	....	....	....
Household Economics	....	4	6	....	....	10	8	2	....	....	....	....	....
Commerce	....	16	5	1	2	24	3	9	12	....	1	....	....
Occasional	....	10	2	....	5	17	6	7	4	....	....	....	....
Totals	....	483	138	42	69	632	308	162	162	54	9	2	30

Second Year

Courses	University of Toronto.	Univ. Coll.	Vic. Coll.	Trin. Coll.	St. M. Coll.	Totals.	Passed.	Starred.	Failed.	Transferred.	Aegrotat.	Deferred.	Debarred.
Pass	....	115	47	26	29	217	126	57	34	....	4	....	14
Supplementals	....	22	13	2	4	41	23	18	....	....	....	....	....
Classics	....	2	2	2	1	7	6	1	....	....	....	1	1
Greek and Hebrew	....	1	....	....	....	1	1	....	....	....	....	....	....
Orientals	....	2	3	....	....	5	5	....	....	....	....	....	....
Orientals, (Greek)	....	1	....	....	....	1	....	1	....	....	....	....	....
Moderns	....	31	14	2	5	52	38	14	....	2	2	2	3
English and History	....	9	9	2	1	21	19	1	1	....	....	....	....
Modern History	....	1	1	....	1	3	2	1	....	....	....	....	1
Political Science	....	33	13	4	1	51	31	18	2	11	....	....	7
Commerce and Finance	....	13	3	....	....	16	9	4	3	4	....	....	1
Philosophy	....	4	2	1	7	14	11	3	....	....	2	....	....
Phil., English and History	....	12	7	1	....	20	18	1	1	....	....	1	....
Mathematics and Physics	....	16	9	....	....	25	17	7	1	7	....	2	2
Biology	....	4	....	....	....	4	2	2	....	1	....	....	1
Biological and Medical Science	....	12	7	2	1	22	20	1	1	....	....	....	....
Chemistry and Mineralogy	....	6	1	....	....	7	5	2	....	....	....	....	....
Chemistry	....	13	1	....	1	15	8	5	2	1	1	1	....
Household Science	....	2	3	....	....	5	4	1	....	1	....	....	....
Household Economics	....	9	6	....	....	15	14	1	....	....	....	....	1
Science for Teachers	....	1	3	....	....	4	4	....	....	....	....	....	....
Occasional	16	1	....	....	....	17	9	....	8	....	....	....	....
Teachers'	42	....	....	....	....	42	38	4	....	....	....	....	....
Totals	58	310	144	42	51	605	410	142	53	27	9	7	31

Third Year

Courses	University of Toronto	Univ. Coll.	Vic. Coll.	Trin. Coll.	St. M. Coll.	Totals.	Passed	Starred	Failed	Transferred	Aegrotat	Deferred	Debarred
Pass	....	56	21	8	19	104	81	16	7	..	....	....	5
Supplementals	....	16	2	....	3	21	18	3	....	..	....	....	....
Classics	....	7	1	1	....	9	9	....	....	..	....	....	....
Orientals (Greek Option)	....	1	....	....	....	1	1	....	....	..	....	....	....
Moderns	....	16	5	1	4	26	25	1	....	..	2	....	....
English and History (Cl)	....	4	2	1	....	7	7	....	....	..	....	....	....
English and History (Mods)	....	10	2	1	1	14	14	....	....	..	....	....	....
Modern History	....	3	4	....	....	7	6	1	....	..	....	....	....
Political Science	....	30	12	3	....	45	41	4	....	..	1	2	3
Commerce and Finance	....	8	2	....	....	10	7	3	....	..	....	....	....
Philosophy	....	2	4	4	8	18	15	2	1	..	....	....	....
Mathematics and Physics	....	9	5	1	....	15	12	3	....	..	....	....	....
Biology	....	3	....	....	....	3	3	....	....	..	....	....	....
Physiology and Biochemistry	....	2	2	....	....	4	4	....	....	..	....	....	....
Physiol and Biochem Science	....	9	1	....	....	10	9	1	....	..	....	1	1
Biological and Medical Science	....	1	1	....	....	2	2	....	....	..	....	....	....
Chemistry and Mineralogy I	....	2	....	....	....	2	2	....	....	..	....	....	....
Chemistry and Mineralogy II	....	2	2	....	....	4	2	2	....	..	....	1	1
Chemistry	....	3	2	3	....	8	5	1	2	..	....	....	....
Household Science	....	....	1	....	....	1	1	....	....	..	....	....	....
Household Economics	....	7	10	....	....	17	12	5	....	..	....	1	1
Science for Teachers	....	1	1	....	....	2	2	....	....	..	....	....	....
Occasionals	....	2	....	....	1	3	1	1	1	..	....	....	....
Teachers'	12	....	....	....	....	12	12	....	....	..	1	....	....
Totals	12	194	80	23	36	345	291	43	11	..	4	5	11

Fourth Year

Courses	University of Toronto	Univ. Coll.	Vic. Coll.	Trin. Coll.	St. M. Coll.	Totals.	Passed.	Granted standing on Active Service	Starred	Failed	Aegrotat	Debarred.	Pass Degree
Pass	....	56	38	7	19	120	91	8	16	5	4	..	..
Supplementals	....	4	1	....	....	5	3	....	1	1	....	..	..
Household Science (G. C.)	....	13	6	1	1	21	20	....	....	1	....	..	..
Classics	....	3	4	4	1	12	10	2	....	....	....	..	1
Orientals	....	....	1	....	....	1	1	....	....	....	....	..	..
Moderns	....	15	6	2	4	27	27	....	....	....	1	..	..
English and History (Cl.)	....	1	2	....	....	3	1	2	....	....	....	..	..
English and History (Mods.)	....	7	2	....	....	9	9	....	....	....	....	..	..
Modern History	....	7	3	1	....	11	11	....	....	....	....	..	..
Political Science	....	21	14	....	....	35	31	3	1	....	1	..	..
Commerce and Finance	....	4	1	....	....	5	3	2	....	....	....	..	..
Philosophy	....	3	2	2	....	7	2	5	....	....	....	..	..
Mathematics and Physics I	....	12	....	....	....	12	9	3	....	....	....	..	..
Mathematics and Physics II	....	7	1	....	....	8	8	....	....	....	....	..	..
Mathematics and Physics III	....	1	....	....	....	1	1	....	....	....	....	..	..
Physics	....	1	....	....	....	1	1	....	....	....	....	..	..
Biology	....	2	2	....	....	4	3	1	....	....	....	..	..
Physiology and Biochemistry	....	1	1	....	....	2	2	....	....	....	....	..	..
Biological and Physical Sciences	....	3	1	....	....	4	4	....	....	....	....	..	..
Physiological and Biochemical Sciences	....	5	1	....	....	6	6	1	....	....	....	..	..
Chemistry and Mineralogy I	....	4	2	....	....	6	6	....	....	....	....	..	..
Chemistry and Mineralogy II	....	....	1	....	....	1	1	....	....	....	....	..	..
Chemistry	....	9	2	....	....	11	11	....	....	....	....	..	..
Geology and Mineralogy	....	....	1	....	....	1	1	....	....	....	....	..	..
Household Science	....	1	....	1	....	2	2	....	....	....	....	..	..
Household Economics	....	2	....	1	....	3	3	....	....	....	....	..	..
Science for Teachers	....	1	....	....	....	1	1	....	....	....	....	..	..
Arts and Forestry	....	1	....	....	....	1	....	....	....	....	....	..	..
Occasional	....	....	....	1	....	1	1	....	....	....	....	..	..
Teachers'	16	....	....	....	....	16	15	....	1	....	....	..	..
Totals	16	184	91	20	25	336	282	27	19	7	6	..	1

(2) Faculty of Medicine

——	Passed	Starred	Failed
First Year (Six Years' Course)	116	42	37
Second Year (Six Years' Course)	91	31	6
Second Year (Five Years' Course)	149	27	17
Third Year (Five Years' Course)	152	72	8
Fourth Year (Five Years' Course	136	29	4
Fifth Year (Five Years' Course)	118	9	4

(3) Faculty on Applied Science and Engineering

——	Passed with Honours.	Passed	Starred	Failed
First Year:				
General	45	80	45	17
Chemical Engineering	7	24	17	.....
Architecture	1	6	2	1
Second Year:				
Civil Engineering	6	45	23	6
Mining Engineering	.....	9	5	1
Mechanical Engineering	15	39	21	2
Architecture	.....	9	5	1
Chemical Engineering	15	40	13	9
Electrical Engineering	27	57	29	4
Metallurgical Engineering	2	6	3	2
Third Year:				
Civil Engineering	13	18	7	.....
Mining Engineering	2	12	7	.....
Mechanical Engineering	5	20	9	7
Architecture	2	1	.....	.....
Chemical Engineering	13	23	12	2
Electrical Engineering	12	26	9	2
Metallurgical Engineering	1	2	2	.....
Fourth Year:				
Civil Engineering	18	19	3	.....
Mining Engineering	3	7	6	.....
Mechanical Engineering	7	18	4	.....
Architecture	6	3	.....	.....
Analytical and Applied Chemistry	6	8	.....	.....
Chemical Engineering	3	7	1	.....
Electrical Engineering	8	15	2	.....
Metallurgical Engineering	1	2	.....	.....

(4) Faculty of Forestry.

——	Passed.	Honours. Deferred.	Failed.
First Year	6	7	7
Second Year	1	10	6
Third Year	7	3	.....
Fourth Year	5	.....	.....
Fifth Year	.....	.....	.....
Sixth Year	1	.....	.....
Special Student	.....	.....	1

(5) Faculty of Education.

——	Passed.	Failed.
*High School Assistants' Course	72	.....
Specialists' Course	47	.....
First Class Public School Course	31	.....
Elementary Art Course	24	.....
Elementary Physical Culture Course	46	.....
One Year Household Science Course	15	.....
Bachelor of Pedagogy Course	4	.....
Bachelor of Pedagogy Course (passed in part)	7	.....
Doctor of Pedagogy Course (passed in part)	38	.....
Number who failed in whole or part	.....	25

(6) Faculty of Music.

——	Passed.	Starred.	Failed.
Bachelor of Music:			
First Year	6	1	.....
Second Year	1	.....	1
Third Year	.....	3	.....
	7	4	1
Local Examinations	553	.....	60

* Many of these are included among those who passed or failed in the other courses in this list.

APPENDIX D

Geographical Distribution of Students

The geographical distribution of students is as follows:—

FACULTY OF ARTS

	University of Toronto	University College.	Victoria College.	Trinity College.	St. Michael's College.	Total
Ontario: (1) Province	34	559	310	93	104	1,100
(1) Toronto	106	535	144	26	94	904
Nova Scotia	5	3	1	.....	1	10
New Brunswick	1	5	1	.....	.....	7
Prince Edward Island	2	2	.....	1	.....	5
Quebec	1	4	4	.....	.....	9
Manibota	10	3	4	1	.....	18
Saskatchewan	9	17	22	1	.....	49
Alberta	3	9	6	2	.....	20
British Columbia	2	10	5	3	.....	20
United States	12	7	4	1	2	26
Elsewhere	4	16	12	1	6	36
Duplicate registrations	.....	.....	.....	.....	.....	11
Totals	189	1,170	510	129	206	2,193

SUMMARY

—	Faulty of Arts	Graduate Studies	Faculty of Medicine	Faculty of Applied Science	Faculty of Education	Faculty of Forestry.	Faculty of Music	Department of Social Service.	Department of Public Health Nursing	Totals.
Ontario:										
(1) Province	1,100	57	624	431	123	24	5	160	69	2,593
(2) Toronto	904	78	363	326	72	20	10	151	50	1,974
Nova Scotia	10	2	7	1	1	.....	.....	11	1	33
New Brunswick	7	1	2	.....	.....	2	.....	5	3	20
Prince Edward Is	5	.....	1	.....	.....	.....	.....	2	.....	8
Quebec	9	.....	7	6	1	2	.....	4	1	30
Manitoba	18	2	7	4	.....	2	.....	3	.....	36
Saskatchewan	49	3	28	10	12	.....	1	7	.....	110
Alberta	20	3	13	8	12	1	.....	3	.....	60
British Columbia	20	5	40	9	4	2	.....	3	1	84
Yukon	.....	.....	2	.....	.....	.....	.....	.....	.....	2
United States	26	8	10	3	11	1	2	6	1	68
Elsewhere	36	4	23	8	2	1	.....	11	.....	85
Duplicates	.....	.....	.....	.....	1	.....	.....	.....	.....	31
Totals	2,204	163	1,127	806	226	55	18	366	126	5,060

The students from the Province of Ontario are distributed as follows:—

County	Faculty of Arts	Graduate Studies	Faculty of Medicine.	Faculty of Applied Science.	Faculty of Education.	Faculty of Forestry.	Faculty of Music.	Department Social Service.	Department of Public Health Nursing	Totals
Algoma	11	1	8	4	1	1	1	2	11	40
Brant	38	2	21	18	3	1		1	2	86
Bruce	25	2	20	11	4	1		6	3	72
Carleton	57	3	15	11	3	6		4	5	104
Dufferin	6		10	4	1			1	1	23
Dundas	8	2	2	3		1		2		18
Durham	13		9	6	2			7	2	39
Elgin	20	1	15	13	3			4	1	57
Essex	31		22	10	2			1		65
Frontenac	2	1	3		2			1		9
Glengarry	2	1			3			1		7
Grenville	3		2	4				1	1	11
Grey	31	1	21	12	2			3		70
Haldimand	9		12	6	3					30
Halton	19	3	17	8	2		1	5	1	56
Hastings	18	1	13	4				7		43
Huron	49	1	17	12	1	1		1		82
Kenora	1		3							4
Kent	27		18	6	2				1	54
Lambton	31		20	10	2	1		2		66
Lanark	17	2	7	6	6					38
Leeds	22	2	9	1	2	1		3	1	41
Lennox and Addington	11	1	5		1			4		22
Lincoln	31	3	16	7				4	1	62
Manitoulin	1		1		1					3
Middlesex	29	4	11	24	13	1	1	2	2	87
Muskoka	7		1	5		1	1	1		16
Nipissing	5		9	5	1			4	2	26
Norfolk	10		7	8	3					28
Northumberland	18	1	8	4	2			2		35
Ontario	41	5	21	15	5			4		91
Oxford	22	1	10	8	2			3	3	49
Parry Sound	7		6	2	1			4		20
Peel	20	1	14	10	1	1		4		51
Perth	43		31	15	5	1		5	1	101
Peterborough	43		8	5	4			8		68
Prescott	1				3			2	4	10
Prince Edward	3		4	1	3			2	1	14
Rainy River	1									1
Renfrew	18		2	2	1					23
Russell	2		1							3
Simcoe	60	2	48	25	5	1		15	3	159
Stormont	5		1	1	2				1	10
Sudbury	9		3	2	1					14
Thunder Bay	9			4						13
Temiskaming	2			4	1			1		8
Victoria	18	3	12	12	3			5		53
Waterloo	24		15	26	2	1		8	1	77
Welland	26		27	14	1			2	1	71
Wellington	60	4	29	9	1	1		9	3	116
Wentworth	70	5	36	29	12	1	1	7	4	165
York	64	4	34	45	5	3		12	4	171
Toronto	897	78	363	326	72	20	10	151	69	1,986
Totals	1,995	135	987	757	195	44	15	311	119	4,558

APPENDIX E.

Publications by Members of the Staff.

Faculty of Arts.

Department of Archæology.

Harcum, Miss C. G.—"Roman Cooking Utensils in the Royal Ontario Museum of Archæology." (American Journal of Archæology, Vol. XXV, No. 1, January-March, 1921.)

Department of Biology.

Clemens, W. A., with Clemens, Lucy S.—"Contribution to the Biology of the Muttonfish, Zoarces anguillaris." (Contributions to Canadian Biology, Ottawa (69).

Huntsman, A. G.—"Age-determination, growth and symmetry in the test of the Ascidian, *Chelyosoma*." (Transactions Royal Canadian Institute, Vol. XIII.)

"The standardization of the names of fishes and other marine products." (Canadian Fisherman, Vol. VII.)

"International Investigation of the ocean." (Canadian Fisherman, Vol. VII.)

Leim, A. H.—"A new species of Spirontocaris with notes on other species from the Atlantic Coast." (Transactions Royal Canadian Institute, Vol. XIII.)

MacArthur, J. W.—"Changes in Acid and Alkali Tolerance with Age in Planarians. With a Note on Catalase Content." (American Journal of Physiology, Vol. 54; pp. 138-145. Nov. 1920.)

Walker, E. M.—"Wohlfahrtia Vigil (Walker) as a Human Parasite." (Journal of Parasitology, Vol. VII, pp. 1-7, 1920, (pl. I)

"The Life Cycle of the Orthopteroid Orders. (Part 2 of a Symposium on the Life Cycle in Insects)" (Annals Entomological Society of America, Vol. XIII, No. 2, 1920, pp. 137-141.)

"Orthoptera Collected in the Canadian Arctic." (Rept. of the Can. Arctic Expedition, 1913-18, Vol. III, Insects, Part J: Orthoptera, 1920, pp. 3J-4J.)

Department of Botany.

Baker, Miss L. V.—"Vestigial Centripetal Xylem and Transfusion Tissue in the Leaf of Pinus Strobus. 19 Text Figures." (Transactions of the Royal Society of Canada. Vol. XIV.)

Brown, H. P.—"Report of the Fertilizing Value of Activated Sludge." (Annual Report of the Provincial Board of Health for Ontario, 1920.)

Faull, J. H.—"Additional Notes on the Needle Blight of the White Pine." (Report of Minister of Lands and Forests, of the Province of Ontario, 1920.)

"Winter Browning of Coniferous Foliage in 1920." (Report of Minister of Lands and Forests, of the Province of Ontario, 1920.)

"Some Diseases of Pulpwood Trees of the Temagami Forest Reserve—including preliminary notes on (a) "Red Branch" of Balsam; (b) A Twig Blight of Balsam; (c) Canker of Poplar." (Report of Minister of Lands and Forests, of the Province of Ontario, 1920.)

"Plant Pathology; its Status and its Outlook." (Transactions of the Royal Society of Canada. Vol. XIV, 1921.)

Sifton, H. B.—"The Seeds of Poisonous Weeds in Concentrated Feeds." (Canadian Veterinary Record, November, 1920.)

"Some Characters of Xylem Tissue in Cycads." (Botanical Gazette, December, 1920.)

"Canadian Plants Injurious in Hay and Coarse Feeds." (Canadian Veterinary Record, March, 1921.)

"Longevity of the Seeds of Cereals, Clovers and Timothy." (American Journal of Botany, June, 1920.)

Department of English.

Horning, L. E., with Jones, G. M. and Morrow, J. D.—"A High School English Grammar."

Bush, Douglas—"A Note on Beowulf 1600-1605." (Modern Language Notes April, 1921.)

"On Hobbies." (Canadian Forum, March, 1921.)

"Celebrities in Transit." (Canadian Forum, April, 1921.)

"Review of Knut Hamsun's Hunger." (Canadian Forum, April, 1921.)

Department of French.

Squair, John—"The New Fraser and Squair Complete French Grammar." (Revision of 1901 edition.) Exercises to Part I by A. Coleman, University of Chicago. (D. C. Heath & Co., Boston.)

"John Seath and the School System of Ontario." (University Press.)

"Statism and Individualism." (Canada First League, January, 1920.)

"David Willson of Sharon 1778-1866." (Transaction No. 20. The Women's Canadian Historical Society.)

Department of History.

Flenley, R.—"Outline of the History of British Artillery to 1815." (Reprint of articles from Journal of Royal Artillery, 1920-21.)

Kennedy, W. P. M.—"Nationalism and Self Determination." (Canadian Historical Review, March, 1921.)

"The Nature of Canadian Federalism." (Canadian Historical Review, May, 1921.)

Williams, R. Hodder—"The Literature of the Peace Conference." (Canadian Historical Review, June, 1921.)

Department of Italian and Spanish.

Goggio, E.—"Relazioni Letterarie fra Italia e Stati Uniti." (Il Carroccio. Vol. XIII, No. 2. August, 1920.)

"Margaret Fuller Ossoli and the Roman Republic." (Il Carroccio. Vol. XIII, No. 1. January, 1921.)

"American Sympathy for Italy's Wars of Independence." (Il Carroccio. Vol. XIII, No. 4. April, 1921.)

Pijoan, J.—"Antique Marbles in the Collection of the Hispanic Society of America, New York."

Department of Mathematics.

Fields, J. C.—"Universities Research and Brain Waste." (Transactions Royal Canadian Institute, Vol. XIII, Part 1.)

Department of Mineralogy.

Walker, T. L.—"Cosalite from Ontario." (University Studies.)
"Dyscrasite from Cobalt, Ontario." (University Studies.)
"Epsomite Lakes near Ashcroft, B.C." (University Studies.)
"Orthoclase from Penticton, B.C." (University Studies.)
"Ulexite from the Maritime Provinces." (University Studies.)
"A Chemical Study of Conglomerates." (University Studies.)
Walker, T. L. with Parsons, A. L.—"Rammelsbergite from Cobalt, Ontario." (University Studies.)
"The Dehydration of Spencerite." (University Studies.)
Walker, T. L. with Thomson, E.—"An Examination of Lillianite and Galenobismutite." (University Studies.)
Parsons, A. L.—"Calcite from Shangoinah Island near Thunder Cape, Lake Superior." (University Studies.)
"Economic Deposits in Thunder Bay District." (Ontario Department of Mines, Vol. XXX., 1921.)
Parsons, A. L. with Thomson, E.—"Animikite and Macfarlanite from Silver Islet, Thunder Bay, Lake Superior." (University Studies.)
Thomson, E.—"A Mineralographic Study of the Pyrite Group." (University Studies.)
"District between Hawk Junction and Wanda on the A.C.R." (Summary Report C.G.S. 1921.)
Todd, E. W.—"Notes on the Analysis of Lead-Bismuth Minerals." (University Studies.)
Gledhill, T. L.—"Iridosmine Crystals from Ruby Creek, Atlin, B.C." (University Studies.)

Department of Philosophy.

Bott, E. A.—"A Point of View." (University of Toronto Studies.)
"Juvenile Employment in Relation to Public Schools and Industries in Toronto." (University of Toronto Studies.)
De Wulf, M.—"L'Œuvre d'Art et la Beauté."
Tracy, F.—"The Psychology of Adolescence." (The Macmillan Company, New York.)

Department of Political Economy.

Jackman, W. T.—"Report on Rural Credits in Ontario." (Ontario Department of Agriculture, 1920.)
"Rural Credit Legislation in Canada." (Bulletin of Economic and Social Intelligence. International Institute of Agriculture, Rome.)
"The Railway Problem in Canada." (Railway Review, May, 1921.)
Jackson, G.—"The Survey of Unemployment in Canada." (Transactions of the International Association of Public Employment Services, 1920.)
"The Medical Profession and the Future." (Transactions of the Ontario Medical Association, 1921.)

Department of Physics.

Burton, E. F.—"Physical Properties of Colloidal Solutions." (Second Edition (Revised), Longmans and Co.)
"Cataphoresis." (Section in the Fourth Report of the Committee of the

British Association for the Advancement of Science on Colloid Chemistry and its General and Industrial Applications.) In collaboration with Miss E. Bishop:—"Coagulation of Colloidal Solutions by Electrolysis." (Journal of Physical Chemistry, Vol. 24, December, 1920, pp. 701-715.)

McLennan, J. C.—"Note on Vacuum Grating Spectroscopy." (Proceedings Royal Society of America, Vol. 98, 1920.)

McLennan, J. C., Young, J. F. T., and Ireton, H. J. C.—"Arc Spectra in Vacuo and Spark Spectra in Helium of Various Elements." (Proceedings of the Royal Society of America, Vol. 98, 1920.)

McLennan, J. C. and Lewis, A. C.—"Spark Spectra of Various Elements in Helium in the Extreme Ultraviolet." (Proceedings of the Royal Society of America, Vol. 98, 1920.)

McLennan, J. C. and Shaver, W. W.—"On the Permeability of Thin Fabrics and Films to Hydrogen and Helium." (Philosophical Magazine, Vol. XL, September, 1920.)

Williams, A. L. with Introduction by Prof. J. C. McLennan—"On the Electrical Conductivity of Copper Fused with Mica." (Philosophical Magazine, Vol. XL, September, 1920.)

McLennan, J. C. and Evans, E.—"On the Mobilities of Ions in Helium at High Pressure." (Transactions Royal Society of Canada, Section III, 1920.)

McLennan, J. C. and Zumstein, R. V.—"On the Absorption and Series Spectra of Lead." (Transactions Royal Society of Canada, Section III, 1920.)

Satterly, J.—"The Pendulum, Simple Harmonic Motion, The Elastic Moduli and Impact—A Laboratory Experiment." (Transactions Royal Society Canada, Vol. XIV.)

"The Practical Study of a Catenary." (Transactions Royal Society of Canada, Vol. XIV.)

"Sir Norman Lockyer, K.C.B., F.R.S." (Journal Royal Astronomical Society of Canada, Vol. XV, 1921.)

"Units in Astronomy." (Journal Royal Astronomical Society of Canada, Vol. XV, 1921.)

Department of Physiology.

Macleod, J. J. R.—"The concentration of lactic acid in the blood in anoxemia and shock." (American Journal of Physiology, Vol. 55, No. 2, March, 1921.)

"Periodic breathing and the effects of oxygen administration in decerebrate cats." (American Journal of Physiology, Vol. 55, No. 2.)

"The Sugar of the Blood." (Physiological Reviews, Vol. 1, p. 208, April, 1921.)

"Physiology and Biochemistry in Modern Medicine." (3rd. edition, C. V. Mosby Co., St. Louis.)

Macleod, J. J. R., Fraser, Mrs. L. M. and Lang, R. S.—"Some observations on the effects of anoxemia on the respiratory center in decerebrate animals." (American Journal of Physiology, Vol. 55, No. 2, March, 1921.)

Macleod, J. J. R., Taylor, N. B., and Self, A. R.—"Effects of hot and cold applications on the superficial and deep temperatures." (The Lancet, 1920, Part II, p. 645.)

Macleod, J. J. R. and Taylor, N. B.—"Temperature Changes in Tissues." (The Lancet.)

Olmsted, J. M. D.—"Effects of cutting the lingual nerve of the dog." (Journal Comparative Neurology, June 15, 1921.) "The results of cutting the seventh cranial nerve in amiurus nebulosus (Lesueur)." (Journal of Experimental Zoology, Vol. 31, No. 4, Nov. 1920, pp. 369-401.)

Taylor, N. B.—"Observations upon the spread of heat through animal Tissues." (Proceedings American Physiological Society, Dec. 1920, vide American Journal of Physiology.)

Faculty of Medicine.

Department of Gynæcology and Obstetrics.

McComb, R. A.—"Prostatectomy." (Canadian Medical Monthly, July, 1920.)

Marlow, F. W.—"Pelvic inflammation." (Canadian Medical Monthly, 1920.)

"Rupture of the Gall Bladder." (Canadian Medical Monthly, 1920.)

"Review of the Forces." (Ontario Medical Association, May, 1920.)

Department of Hygiene.

FitzGerald, J. G.—"An Outline of the Practice of Preventive Medicine." (C. V. Mosby and Company, St. Louis, Mo.)

"An Analysis of Diphtheria Deaths in Ontario." (Public Health Journal, Vol. XI, No. 11, Nov. 1920, pp. 485-502.)

Caulfeild, A. H. W.—"Bacillus Perfringens: Toxin and Antitoxin Production." (The Journal of Infectious Diseases, Vol. 27, No. 2, Aug. 1920, pp. 151-164.)

"Sensitization in Bronchial Asthma and Hay Fever." (The Journal of the American Medical Association, Apl. 16, 1921, Vol. 76, pp. 1071-1078.)

"Symposium on Tuberculosis."—"The Scope of a Central Clinic for Chronic Pulmonary Diseases Working in Correlation with Research Laboratories." (Academy of Medicine, Toronto, Nov. 1919. The Canadian Medical Monthly.)

"Additional Methods in the Diagnosis of Intraocular Tuberculosis." (American Review of Tuberculosis, Vol. 3, 1921.)

"A Comparison between the Interpretation of the Findings in Chronic Pulmonary Lesions by Clinical and Stereoröntenographic Examination." (The Journal of the Canadian Medical Association.)

"A Note on the desensitization of guinea-pigs." (Proceedings of the Society for Experimental Biology and Medicine, 1915, pp. 171-173.)

Moloney, P. J.—"A Hydrogen Electrode." (Journal of Physical Chemistry.)

Moloney, P. J. and Hanna, L.—"Contribution to the Study of Diphtheria Toxin I." (Proceedings Society Experimental Biology and Medicine.)

Hodge, W. R. and Cohen, C.—"Investigation of Streptococci in Bronchial Asthma and Chronic Bronchitis."

Department of Medicine.

Boyd, Miss G. L.—"Nephritis in Children, a Clinical, Functional and Pathological Study." (Canadian Medical Journal.)

Brown, A.—"Malnutrition in Public School Children in Toronto." (Canadian Medical Association Journal.)

"Blood Transfusion in Children, its Indications, Scope and Analysis of 600 cases." In collaboration with Dr. L. B. Robertson, dept. of Surgery.)

"Acrodynia, a Clinical and Metabolism Study." In collaboration with A. M. Courtney, dept. of Pediatrics.)

Courtney, Miss A. M.—"Acrodynia: a Clinical and Metabolic Study." In collaboration with Dr. A. Brown and Miss I. F. MacLachlan. (Canadian Medical Association Journal.)

Dixon, H. A.—"Diphtheritic Ulceration of the Skin." (Canadian Medical Association Journal, February, 1921.)

Elliott, J. H.—"The Development of the Campaign against Tuberculosis." (Journal of the Outdoor Life, Vol. XVII, No. 3, December, 1920.)

"Inaugural Address of the President. Academy of Medicine, Toronto, October 5th, 1920." (The Canada Lancet, Vol. 54, No. 2, October, 1920.

"Pregnancy and Tuberculosis." (The American Review of Tuberculosis, Vol. LV, No. 10, December, 1920.)

"Case Report, Gun shot wound of Chest in a case of Tubercle of the Lung treated by Pneumothorax." (Transactions, American Climatological and Clinical Association, 1920.)

"Pulmonary Complications following Tonsillectomy." (Academy of Medicine, Toronto, April 11th, 1921.)

Jamieson, R. A.—"Auricular Tibullation." (Univ. of Toronto Medical Bulletin, March, 1921.)

Lougheed, G. W..and Dr. Leonard Murray—"A series of Cases of Subacute Bacterial Endocarditis of Aortic Valves." (The Canadian Medical Journal.)

MacLachlan, Miss I. F.—"Cod-Liver Oil just as Effective as Cod-Liver Oil and Phosphorus in the Cure of Rickets and Tetany." In collaboration with Dr. Alan Brown and Dr. Roy Simpson. (Canadian Medical Association Journal.)

"Acrodynia: a Clinical and Metabolic Study." In collaboration with Dr. Alan Brown and Miss A. M. Courtney. (Canadian Medical Association Journal.)

McVicar, C. S.—"Medical Reconstruction." (Nelson's Loose Leaf Medicine, Vol. VII.)

Ogden, W. E.—"Need and Correlation of Sanatoria near Toronto for non-tuberculous Pulmonary Diseases." (The Canadian Medical Monthly, July, 1920.)

"Prognosis and Diagnosis in Tuberculosis as aided by Serology." (Canadian Medical Association Journal.)

Rae, C. A.—"The question of Dosages in the prevention and treatment of Diphtheria." (The Canadian Journal of Medicine and Surgery, June, 1921.)

Smith, D. K.—"Observations From the Dermatological Clinic of the Department of Soldiers' Civil Re-Establishment of Canada, Toronto Branch."

"Oriental Sore—Report of Four Cases."

Strathy, G. S.—"A Further Study of Liver Atrophy by X-Ray Examination." (Canadian Medical Association Journal, Dec. 1920.)

"Further Experience on Estimating the Effects of Military Service on Insurance Risks." (Proceedings of the Association of Insurance Medical Directors, 1920.)

Department of Ophthalmology.

Burnham, G. H.—"Blows upon the Eyeball in the Region of the Ciliary Processes —their Medico-Legal aspect." (American Journal of Ophthalmology, November, 1920.)

"Clinical Remarks upon some Varieties of Glaucoma, especially with reference to Pragnosis and Treatment." (American Journal of Ophthalmology. May, 1921.)

Department of Oto-Laryngology.

Goldsmith, P. G.—"A Consideration of the Pathology and Treatment of Otosclerosis." (Otological Section of New York Academy of Medicine.)

"Headaches of Nose, Throat, and Ear Origin." (Academy of Medicine, Buffalo.)

"The Pathology and Treatment of Chronic Catarrhal Deafness." (Ontario Medical Association, Niagara Falls.)

"Introduction to the discussion on the End Results of Nasal Accessory Sinus Surgery." (Middle Section of the American Laryngologicol, Rhinological and Otological Society, Chicago.)

"A Consideration of the Anatomy of the Faucial Tonsils and their Surgical Removal." (Niagara District Medical Meeting, Welland.)

"Abstracts of Otolaryngological Literature." (Journal of Laryngology and Otology.)

Department of Pathology and Bacteriology.

Maitland, H. B., Cowan, Miss M. L. and Detweiler, H.K.—"The Aetiology of Epidemic Influenza: Experiments in Search of a Filter-Passing Virus." (British Journal of Experimental Pathology, 1920. Vol. I. p. 263.)

"Spontaneous and Artificial Pulmonary Lesions in Guinea-Pigs, Rabbits and Mice." (British Journal of Experimental Pathology, 1921, Vol. II, p. 8.)

Maitland, H. B., and Cameron, G. C.—"The Aetiology of Epidemic Influenza: A Critical Review." (The Canadian Medical Association Journal, June, 1921.)

Department of Radiology.

Richards, G. E.—"The Diagnosis of Gastric Ulcer." (The Canadian Medical Association, January, 1921.)

"Recent Developments in the use of X-Rays in Gynæcology."

"Some Problems in Deep Therapy with Case Reports using a Twelve Inch Spark Gap."

In collaboration with G. H. Bingham:

"Co-Relation of Results of Treatment by Surgical and X-Ray Methods." (The Canadian Medical Association Journal, November, 1920.)

Department of Surgery.

Gallie, W. E. and LeMesurier, A. B.—"The Use of Living Sutures in Operative Surgery." (The Canadian Medical Association Journal, 1921.)

Harris, R. I.—"A Memorandum on the Measurement of Movements of Joints."

"An Operation for the Relief of Median Anæsthesia."

"The Treatment of Irreparable Nerve Injuries."

Department of Therapeutics.

Rudolf, R. D.—"The Therapeutic Use of Oxygen." (American Journal of the Medical Sciences, July 1920, and Medical Press and Circular, London, July 28th, 1920.)

"The Medical Treatment of Disease." (Textbook published by the University of Toronto Press, January, 1921.)

"The Treatment of Anæmia by Drugs." (The Canadian Medical Association Journal, June, 1921.)

"The Normal Point on the Clinical Thermometer."

FACULTY OF APPLIED SCIENCE.

Department of Architecture.

Berrington, A.—"Town Planning Schemes for Greater Paris." (The Architects' Journal of June 16th and 23rd.) (The Builder, June 25th.)

"The Paris Competition." (Town Planning Review, December 1920.)

Department of Applied Mechanics.

Gillespie, P.—"Engineers and Affairs—A Worthy Prototype." (Canadian Engineer, Nov. 11th, 1920)

"Dosing Tanks for Sprinkling Filters." (Canadian Engineer, April 21st, 1921.)

"De Lavand Process of Pipe Manufacture." (Canadian Engineer, May 12th, 1921.)

Young, C. R.—"Rapid Determination of True Net Sections of Riveted Tension Members." (Engineering and Contracting, Aug. 25th, 1920.)

"New Specification for Net Section of Riveted Tension Members." (Canadian Engineer, Oct. 14th, 1920.)

"Characteristics of Long Span Suspension Bridges." (Canadian Engineer, Nov. 4th, 1920.)

"Reduction of Girder and Column Live Loads." (Canadian Engineer, Dec. 2nd, 1920.)

"Torsion on Rectangular Cross Sections." (Canadian Engineer, Mar. 24th, 1921.)

"Structural Engineering as a Specialty." (Transactions, Univ. of Toronto Engineering Society, 1920-21.)

"Structural Problems, Part 1." (Transactions, University of Toronto Engineering Society, Sept. 1920.)

"Structural Problems, Part 2." (Transactions, University of Toronto Engineering Society, Jan. 1921.)

FACULTY OF FORESTRY.

Millar, W. M.—"Methods of Communication Adapted to Forest Protection." (pp. 230, illus. 120.) (Dominion Forestry Branch, Department of the Interior, 1920, Ottawa.)

ONTARIO COLLEGE OF EDUCATION.

Crawford, J. T.—"Senior High School Algebra—300 pages." (The Macmillan Company of Canada, Toronto.)

"Mathematical Tables." 32 pages. (A. T. Wilgress, Toronto.)

DEPARTMENT OF SOCIAL SERVICE.

Dale, J. A.—"The Right Track: History of the Movement for Compulsory Education in Quebec, by the late Irving Vincent." (Dent, Toronto.)

" Ruskin and Shakespeare. in Ruskin the Prophet: being Centenary Essays by John Masefield, W. R. Inge, C. F. G. Masterman, Lawrence Binyon, J. A. Hobson, J. A. Dale, J. H. Whitehouse and H. W. Hevinson." (G. Allen and Unwin, London.)

" Canadian Universities." (Manchester Guardian.)

" Education, Production and Democracy." (Canadian Railroader.)

" A Continuation School Scheme." (Canadian Railroader.)

" Child Welfare." (Echoes: I.O.D.E.)

DEPARTMENT OF PUBLIC HEALTH NURSING.

Russell, Miss E. K.—"Public Health Field Work for the Undergraduate Nurse." (The Canadian Nurse, August, 1920.)

SUPERINTENDENT'S REPORT

Buildings.

This year, the University has had two buildings in course of erection. The new Electrical Building, while not finally completed, was largely used by the Departments of Electrical Engineering and Applied Mechanics after January 1st, 1921. The Superintendent's department did the plumbing, heating, electric wiring and furnishings in this building, our contracts approximating $75,000.00.

The new Press Building, started June 7th, 1920, was occupied by the Press and Students' Book Department in late September 1920. This deparment did the plumbing, heating and electric wiring in this building, involving approximately $9,000.00.

In April the old house at No. 2 Surrey Place was torn down to make way for a Reception Hospital to be built by the City.

With the removal of the Departments of Electrical Engineering and Applied Mechanics from the Engineering Building, a general rearrangement of space in this building was necessary. These changes were made and the building repaired and renovated at a cost of $15,000.00.

The Superintendent's department now has under its supervision a total of thirty-two buildings.

Grounds.

The front lawn has been restored but it has been decided not to touch the back lawn although it is in very bad shape until such time as prospective buildings in its vicinity are erected. The University roads, with the large increase in motor traffic have become a serious problem. These roads were not built for present traffic requirements and, in spite of continual repair, will not stand up. They are also too narrow for the increased traffic. The University will have to consider the building of more permanent and wider roads with curbs to protect the lawn margins.

Workshops.

The amount of work done by our staff of tradesmen has increased until, for the year ending June 30th, 1921, it amounted to approximately .$225,000.00 The average number of tradesmen employed, plumbers, carpenters, steamfitters, electricians and painters was 67, while in June, the maximum number reached 94. This work is done under the handicap of an inadequate building designed for a power plant and not for workshops.

The total number of employees operating under the supervision of this office averaged 172 with a maximum number of 204 in June.

Central Plant.

The question of fuel supply this year has been most difficult. During the summer and autumn coal was exceedingly scarce and very high in price. As we must, to ensure continuous operation, store a large part of our burning before the heating season begins, we, with other consumers, had to buy coal at greatly increased prices. This condition lasted until early December, when the situation broke and the price of coal was much easier. The effect of this high priced coal is noted in our operation charges. While the weather was exceptionally mild, 6.5° above the average, and we only burned 8,458 tons, as against 9,359 tons the previous year, the total cost of operation rose from $84.701.00 to $147,000.00, due largely to

the fact, that while in 1919-20 coal cost us on an average of $6.62 per ton, f.o.b. Storage, in 1920-21 it cost $12.34 per ton, f.o.b. storage. During 1920-21 two additional buildings were added to our load, the Electrical Building and the Press.

Comparative tables showing the operation of the Central Plant and the distribution of charges for the years 1919-20 and 1920-21 are appended.

A. D. LEPAN,
Superintendent.

COMPARATIVE STATEMENT OF DISTRIBUTION OF COST OF OPERATING POWER HOUSE.

	1919-1920		1920-1921		1919-1920		1920-1921	
	Square feet of radiation in buildings	Percentage charge	Square feet of radiation in buildings	Percentage charge	Light	Heat	Light	Heat
					$ c.	$ c.	$ c.	$ c.
Main	13,664	7.197	13,844	6.701	250 52	5,317 36	323 48	9,202 33
Political Science					10 96		12 56	
Hart House	31,134	12.376	31,134	12.623	2,595 42	9,143 76	2,585 96	17,334 86
Library	10,865	4.228	10,900	4.028	135 32	3,004 77	220 50	5,531 56
Univ. Press					300 00	80 00		
Stu. Bk. Dept					2 10	39 00		
Medical	7,722	4.413	8,183	3.987	697 68	3,260 46	500 74	5,475 25
Biological	8,271	3.360	8,407	3.139	99 28	2,482 47	113 72	4,310 71
Engineering	9,453	4.242	9,453	3.745	456 66	3,134 12	306 66	5,142 92
Electrical					618 34		589 48	
Thermodynamics	5,236	2.296	5,236	2.065	77 14	1,696 35	89 98	2,835 82
Observatory	674	.255	674	.247	15 00	188 40	15 00	339 20
Mining	14,536	6.762	14,083	6.276	924 26	4,995 97	978 92	8,618 68
Furnace					92 16		120 94	
Milling					61 00		28 60	
Chemical	6,795	3.057	6,867	2.909	135 70	2,258 60	326 44	3,994.86
Physics	20,648	7.537	20,648	8.352	1,027 62	5,568 56	919 30	11,469 60
Convocation Hall	6,689	2.835	6,689	2.813	19 82	2,130 05	53 10	3,863 03
Men's Residences	9,336	4.908	9,336	4.627	422 78	3,626 18	469 34	6,354 16
Household Science	10,137	4.465	10,137	3.636	171 50	3,296 66	159 62	4,993 23
Museum	17,231	6.400	17,231	5.730	145 06	4,728 51	188 20	7,868 87
Electrical			8,977	3.306			18 28	4,540 05
Press			2,812	1.111			289 80	1,525 71
Wycliffe College	12,371	6.311	12,371	6.160	239 60	4,062 76	229 40	8,459 38
Victoria College	9,028	}	9,028	}	158 32		169 20	
Burwash Hall	8,377	} 8.657	8,377	}	518 28	6,396 05	441 06	
Victoria Coll. Lib.	4,021	1.519	4,021	} 9.430	40 96	1,122 28	40 04	12,950 00
Burwash D. Hall					116 02		109 72	
Annesley Hall	4,274	2.343	4,481	1.992	183 06	1,731 08	186 76	2,735 57
Knox College	15,402	6.794	15,402	7.123	399 04	5,019 61	284 20	9,781 85
Old Gymnasium					104 36			
Univ. Coll. Wom. Union					14 24		29 50	
No. 4 Queen's Pk					87 72		69 22	
Social Service					6 86		8 60	
No.184 College St.					89 44		12 92	
No. 100 Queen's Park					21 82		26 00	
Grounds					250 00		250 00	
Stadium					208 41		130 35	
I.S.C. Mining Building					122 40			
Total	225,864	100.000	238,291	100.000	10,818 85	73,883 00	10,297 59	137,327 64

POWER-HOUSE.—COAL

	1919-20	1920-21
Maximum Daily Consumption	79 tons	79 tons
Maximum Weekly Consumption	462 "	403 "
Average Daily Consumptipn		
September-October	17 "	15 "
November	36 "	39 "
December	51 "	41 "
January	58 "	49 "
February	52 "	48 "
March	44 "	38 "
April	34 "	24 "
May	23 "	16 "
Total Consumption	9359.0480 tons.	8458.1060 tons
Total cost of operation	$84,701 85	$147,625 23
Load in square feet of radiation	225,864	238,291
Light and Power charges	$10,818 85	$10,297 59
Cost of heat	$73,883 00	$137,327 64
Cost of heat per square foot of radiation	32.712c.	57.630c.

Note.—In this distribution of cost, no allowance is made for high pressure steam supplied.

TEMPERATURES

	1919-20		1920-21	
October	53.0	6.5 above aver.	54.9	8.3 above aver.
November	38.2	2.2 " "	36.7	0.8 " "
December	22.7	3.4 below aver.	31.5	5.3 " "
January	13.0	8.9 " "	27.8	6.0 " "
February	20.2	2.0 " "	28.5	6.4 " "
March	33.8	5.2 above aver.	38.5	9.8 " "
April	40.1	1.1 below aver.	49.3	8.1 " "
May	54.5	2.1 above aver.	60.0	7.6 " "
Yearly Average		.07 " "		6.5 " "

General average of Temperatures taken from years 1840-1898.

AUDITOR'S REPORT.

TORONTO, 27th October, 1921.

To the Governors of the University of Toronto:

Gentlemen:—

Herewith I present the Financial Statement of the University for the fiscal year ending 30th June, 1921, and beg to report that all the transactions of the year upon Revenue Account and Capital Account have been duly audited and approved of.

Yours faithfully,
(Sgd.) G. T. CLARKSON.
Auditor.

FINANCIAL STATEMENT

APPENDIX I.

BALANCE SHEET, 30TH JUNE, 1921.

Funds and Liabilities.

General Endowments Fund	Schedule 1	$6,336,464 99	
Specific Endowment Funds	" 2	225,037 95	
Retirement Fund	" 3	34,792 47	
Trust Funds	" 4	320,157 51	
Annuity Debentures	" 5	911,731 61	
Contingent Funds, etc.	" 6	80,882 12	
Fees paid in advance		955 00	
			$7,910,021 65

Assets.

Site Lands, Buildings and Contents	Schedule 7	$5,992,014 78	
Unproductive Lands	" 8	57,095 31	
Leased Properties	" 9	656,075 20	
Investments, Cash and Accounts Receivable	" 10	1,194,987 06	
Superintendent's Stores	Appendix V	9,849 30	
			$7,910,021 65

SCHEDULE 1.

General Endowments Fund.

Additions for 1920-21:		
Electrical Engineering Building,		
Grant for construction received from the Legislature		$350,000 00
Convocation Hall Advance:		
Restoration from proceeds of Wild Lands Sales, fifteenth instalment		1,251 06
Annuity debentures:		
Portion of 1920-21 instalments reducing principal:		
Twelfth instalment, issue of July, 1909	$8,099 66	
Tenth instalment, issue of January, 1911	1,950 00	
Tenth instalment, issue of January, 1911	4,501 00	
Sixth instalment, issue of April, 1915	1,280 17	
		$15,830 83
Increased valuation of University Park lease upon renewal Part Lots 55 and 56		$10,800 00
Building No. 6 Queen's Park, further payment upon purchase		468 67
Building No. 100 Queen's Park, third of ten instalments paid on purchase		720 00
Building No. 8 Queen's Park, sixth of ten instalments paid on purchase		750 00
Building No. 184 College Street, fifth of ten instalments paid on purchase		500 00
Library proper:		
Additions for year, less depreciation (Schedule7)		14,954 85
Gymnasium Equipment:		
Additions for year ($7,620 19, less old equipment written off, $1,800)		5,820 19
		$401,095 60

Contra.

Amount of account carried for No. 2 Surrey Place as a proposed Botanical building now written off, as house demolished to make room for Psychiatric Hospital ($13,000 less sundry credits, $1,717.30)	$11,282 70

Central Power Plant, repayments from Revenue to 1920 inclusive written off asset account	$163,759 57	
		$175,042 27
		$226,053 33
Return of 30th June, 1920		6,110,411 66
Return of 30th June, 1921		$6,336,464 99

Note: This statement does not include any assets or liabilities of the Toronto Conservatory of Music.

SCHEDULE 2.

Specific Endowment Funds (Scholarships, Prizes, etc.).

Blake Matriculation	$30,443 72
Charles Mickle Fellowship	27,800 77
Ellen Mickle Fellowship	27,800 77
Mackenzie Memorial	18,342 60
McCharles Bequest	12,745 46
Khaki University Memorial Scholarships	12,000 00
John McCrae Scholarship	11,107 36
James H. Richardson Research Fellowship	10,000 00
Pearson Kirkman Marfleet Lectureship	6,500 00
Starr Bequest	6,451 09
George Brown, Medical Science	5,391 72
Porter, University Schools	5,000 00
Young Memorial	4,394 51
Gibson Pass Matriculation	4,110 00
Blake, Science and Moderns	3,750 00
Fulton Bequest	3,351 30
George A. Peters Scholarship	3,100 00
Mary Mulock, Classics	2,838 74
Gibson Matriculation	2,725 00
A. A. A., Physics	2,350 00
All Souls Historical Essay Prize	2,155 00
John Macdonald, Philosophy	2,080 00
Moss, Classics	2,000 00
William Mulock, Classics and Mathematics	2,000 00
Daniel Wilson, Natural Science	2,000 00
Bankers', Political Science	1,200 00
George Brown, Modern Languages	1,128 34
Balmer, Science	1,126 58
William Ramsay, Physics	1,102 50
G. R. R. Cockburn, Greek	1,050 00
Quebec Bonne Entente Prize	1,050 00
Booth, University Schools	1,010 00
William Ramsay, Political Economy	1,009 42
William Hardie	1,000 00
Julius Rossin, German	1,000 00
Prince of Wales, General Proficiency	950 00
Anna Howe Reeve Prize	650 00
Chappell Prize	597 74
Lyle Medal	404 33
Squair French Prose Prize	280 00
R. A. Reeve Scholarship	250 00
Marion E. Dickenson, Household Science	200 00
Boiler Inspection and Insurance Company Scholarship	130 00
Graduate Fellowship, American Alumni	125 00
Jardine Memorial Prize	100 00
R. A. Reeve Prize	100 00
Board of Trade, Commerce and Finance	83 00
Reading Camp Association Prize	50 00
McCaul Scholarship	3 00
Ledger balances on 30th June, 1921	$225,037 95

Specific Endowment Funds (Scholarships, Prizes, etc.)—Continued.

Return of 30th June, 1920	$204,445 68	
Additions to funds during year (including income from bonds)	23,603 05	
Interest written to endowments	4,661 22	
	232,709 95	
Scholarship expenditures	7,672 00	
Return of 30th June, 1921		$225,037 95

SCHEDULE 3.

Retirement Fund, Beneficiaries, 30 June, 1921.

W. Lash Miller	$11,058 18	
T. L. Walker	9,808 20	
W. A. Parks	5,174 04	
J. W. Bain	4,040 05	
H. W. Price	3,446 15	
J. Christie	1,265 85	
		$34,792 47
Fund of 30 June, 1920	$30,192 56	
Contributions, 1920-21	2,973 00	
Interest written	438 91	
Interest from War Loan Bonds	1,188 00	
Return of 30 June, 1921		$34,792 47

SCHEDULE 4.

Trust Funds.

Connaught Antitoxin Laboratories:		
Research Fund	$100,000 00	
" (operating)	1,376 38	
Surplus Account	22,844 22	
Health Service	15,000 00	
		$139,220 60
Library Funds:		
King Alfred Millinary	12,582 92	
Phillips Stewart	1,694.00	
John Squair French No. 1	1,254 50	
John Squair French No 2	1,027 50	
Alex. Edwin Hamilton	935 00	
		17,493 92
Eaton Endowment		37,065 45
E. C. Walker Bequest (Residences)		29,271 65
Massey Foundation		27,137 00
Medical Research Fund		21,144 85
J. Harrington Walker Bequest (Residences		15,000 00
Massey-Treble Bequest, Household Science		7,871 48
R. A. Reeve Bequests (not allocated)		4,800 00
Ontario College of Education, superannuation credits		2,566 43
University Studies		2,545 17
Fulford Estate Donation (Base Hospital)		2,001 56
Mary A. Simpson Bequest (not allocated)		1,153 31
Caput Fines		1,018 07
J. C. McLennan		875 00
Microscopes Fund, Pathology		840 00
Special Investigation Fund, Pathology		792 50
Public Health Nursing		716 39
Advisory Council, Food Research		676 33
John Hughes Horton Bequest (not allocated)		650 66
McCormick Fund, Social Service Department		551 85
Ontario Archæology Special Fund		485 00
Hart House Deposit		357 97
Women's Residence		50 00
John Langton Memorial		30 00
Dental Research Fund		12 32

Trust Funds.—Continued.

Sundry Security Deposits:		
Residences	$2,405 00	
Summer Session	1,325 00	
Keys	100 00	
R. J. Hamilton	2,000 00	
Ledger balances on 30 June, 1921		$320,157 51
Return of 30 June, 1920	143,296 85	
Net additions to Schedule during year, including transfers from Equipment Funds	169,674 46	
Interest written to endowments	7,186 20	
Return of 30 June, 1921		$320,157 51

SCHEDULE 5.

Annuity Debentures.

Issue of July, 1909, $500,000, repayable in forty equal annual amounts of $25,260 each,	
Value as on 30 June, 1921, of the (twenty-eight) outstanding instalments	$420,908 82
Issue of January, 1911, under 1 George V, Cap. 80, for construction of Pathological building, $130,000, repayable in forty equal annual amounts of $6.568 each,	
Value as on 30 June, 1921, of the (thirty) outstanding instalments	113,574 00
Accrued on 30 June, 1921, of eleventh payment and charged to Revenue, 1920-21	3,284 00
Issue of January, 1911, under 1 George V, Cap. 80, as a grant towards construction of Toronto General Hospital, $300,000, repayable in forty equal annual instalments of $15,157 each.	
Value as on 30 June, 1921, of the (thirty) outstanding instalments	262,092 00
Accrued on 30 June, 1921, of eleventh payment and charged to Revenue, 1920-21	7,578 50
Issue of April, 1915, under R.S.O., 1914, Cap. 279, to provide for the payment of $100,000 to the Hart A. Massey Estate towards the Gymnasium portion of Hart House, $110,000, repayable in forty equal annual instalments of $5,975 each.	
Value as on 30 June, 1921, of the (thirty-four) outstanding instalments	103,049 49
Accrued on 30 June, 1921, of seventh payment and charged to Revenue, 1920-21	1,244 80
	$911,731 61

SCHEDULE 6.

Contingent Funds, etc.

Contingent Fund (Investment Reserve):			$22,603 15
Special Grant voted by Legislature for 1920-21		$880,000 00	
Deficit upon ordinary Revenue account for the year as per Schedule 6a	$868,469 98		
Balance brought forward from 1919-20	9,310 94		
		877,780 92	
			2,219 08
Special Grant voted by Legislature on Hospital Account		125,000 00	
Paid over to Toronto General Hospital		125,000 00	
Balance on hand 30 June, 1921, of Legislative grant for Electrical Engineering building ($350,000), less expended to date, ($324,348 93)			25,651 07
Grant on account of Ontario College of Education			33,000 00

Contingent Funds, Etc.—Continued.

Organ Fund:		
Balance on 30 June, 1920	$2,082 11	
Surplus music fees transferred	1,434 76	
	3,516 87	
Expenses of recitals and upkeep, 1920-21	360 20	
		3,156 67
		$86,629 97
Less items in suspense:		
Anatomical building, Construction account	4,455 50	
Publications Account, University Press	1,292 35	
		5,747 85
		$80,882 12

SCHEDULE 6*a*.

Revenue, 1920-21.

Receipts.

	Estimate.	Actual.
Legislative Grant, University Act, 1906	$500,000 00	$500,000 00
Lgislative Grant, 60 Vict., Cap. 59	7,000 00	7,000 00
Grant by Provincial Government on account of Faculty of Education	15,000 00	.....
Grant by Provincial Government for Special Course in Household Science	4,500 00	.....
Fees, University and College, as detailed in Appendix II	425,000 00	380,387 47
Interest:		
On Purchase Moneys	1,750 00	1,658 11
On Loans	500 00	419 77
On Debentures	9,550 00	8,482 76
On War Loan Bonds	12,500 00	11,581 34
On University Press Advance	.....	1,688 24
Rentals:		
University Park ground leases	18,500 00	19,059 20
City of Toronto payment	6,000 00	6,000 00
Business Properties	6,800 00	7,555 25
Sundry houses, etc.	1,700 00	1,375 06
Sundry Land Earnings	.....	406 50
Men's Residence Dues	20,000 00	20,999 00
Women's Residence Dues:		
(Queen's Hall group, $29,445 15; St. George Street, $5,844 80)	36,600 00	35,289 95
University College Women's Union:		
Membership fees	1,600 00	2,097 00
Receipts from rooms and meals	17,612 00	20,023 40
Central Power Plant:		
Wycliffe, Victoria and Knox Colleges..... $40,650 32		
Royal Ontario Museum 8,057 07		
Sundry Accounts 1,982 57		
	50,000 00	50,689 96
Sundry Investment Earnings	.....	4,666 10
Casual Revenue	.....	3,488 63
	$1,134,612 00	$1,082,867 74
Expenditures		
Under appropriations as per Appendix III	$1,994,938 00	$1,937,516 21
Interest written to Scholarship and other Funds	10,000 00	12,286 33
Interest on bank overdraft	10,000 00	1,375 10
Item written off	.....	160 08
	$2,014,938 00	$1,951,337 72
Receipts as above	1,134,612 00	1,082,867 74
Expenditure in excess of receipts carried to Schedule 6	$880 326 00	$868,469 98

SCHEDULE 7.

Site Lands, Buildings and Contents.

Site Lands:		
2,819,195 sq. feet at forty cents per foot	$1,127,678 00	
192,483 sq. feet at cost price	167,048 00	
		$1,294,726 00
3,011,678 sq. feet.		
Buildings:		
Household Science building	$455,000 00	
Main building	450,000 00	
Mining building and annex	384,736 89	
Physics building	363,945 85	
Library building	327,425 50	
Convocation Hall and annex	214,866 22	
Education building and annex	191,082 10	
Pathological building	169,694 38	
Medical building	165,000 00	
Biological building	129,745 30	
Thermodynamics building	119,017 21	
Chemical building	77,469 88	
Architectural building	50,000 00	
Electrical Engineering building	350,000 00	
Forestry building	30,101 65	
Press building	46,019 22	
Geodetic Observatory building	12,000 27	
Political Science building	11,933 26	
Military Studies building	8,239 47	
Social Service building	7,500 00	
No. 1 Queen's Park (Department of Medicine)	6,075 77	
Men's Residences	170,000 00	
Women's Residences	85,706 36	
University College Women's Union	13,521 18	
Argyll House	10,450 00	
Y.M.C.A. building	1 00	
	$3,849,531 51	
Less balances of purchase money yet due on Social Service and Military Studies buildings and Argyll House	10,540 00	
		$3,838,991 51
Library	$237,797 32	
General Museum Specimens	1 00	
Convocation Hall Organ	19,603 11	
		$257,401 43
Departmental Equipment:		
1. Faculty of Arts:		
Physics	29,250 00	
Chemistry	14,040 00	
Physiology	12,500 00	
Mineralogy	10,145 00	
Geology	7,505 00	
Biology	6,131 25	
Botany	5,500 00	
Psychology	2,700 00	
Astronomy	1,635 00	
Mechanics	750 00	
Mathematics	500 00	
2. Faculty of Medicine:		
Pathology	18,440 56	
Pathological Chemistry	7,925 74	
Pharmacology	2,430 00	
Anatomy	1,340 00	
3. Faculty of Applied Science:		
Electrical Engineering	30,923 00	

Site Lands, Buildings and Contents.—Continued.

Mining	$ 16,270 00	
Surveying	12,980 00	
Architecture and Drawing	10,830 00	
Chemical Engineering and Applied Chemistry	10,114 00	
Applied Mechanics	10,075 00	
Mechanical Engineering	10,000 00	
Physics and Photography	4,127 00	
4. Faculty of Household Science	19,000 00	
5. Faculty of Education	10,000 00	
		$255,111 55
Furniture and Furnishings:		
Men's Residences	13,198 30	
Women's Residences	8,950 08	
University College Women's Union	950 00	
Education building	1,775 91	
General furniture, various buildings	11,938 00	
		$36,812 29
Athletic Field Stadium and equipment		$11,817 88
Gymnasium equipment		7,620 19
Dining Hall equipment		1 00
Printing Plant		1 00
Connaught Laboratories, Farm, buildings and equipment		75,000 00
Antitoxin Laboratory (Medical building)		1 00
Central Power Plant		213,930 93
Surveying Practice Camp, Lutterworth Township		600 00
Total valuation		$5,992,014 78

Return of 30 June, 1920		$5,897,077 44	
Additions thereto:			
Library Proper:			
Value of additions for 1920-21 as reported by the Librarian	$22,309 40		
Less depreciation at 3% on $245,151 87	7,354 55		
		$14,954 85	
Gymnasium Equipment:			
Value of additions to equipment in Hart House	$7,620 19		
Less already entered in account	1,800 00		
		$5,820 19	
Electrical Engineering Building:			
Estimated cost of construction	$350,000 00		
Less already entered in this Schedule	126,304 23		
		$223,695 77	
Press building:			
Cost of construction	$66,642 03		
Less transferred from earnings of Press	20,622 81		
		$46,019 22	
Military Studies building:			
Valuation attached to 184 College Street transferred from Women's Residences		8,239 47	
Instalments paid on balances due on purchase of houses		1,970 00	
			$6,197,776 94

Contra.

Central Power Plant:			
Repayments from Revenue to 1920 inclusive transferred from General Endowments and written off valuation	$163,759 57		
Repayment for 1921	20,208 00		
		$183,967 57	
Botanical building, 2 Surrey Place, demolished		13,000 00	

Site Lands, Buildings and Contents.—Continued.

Women's Residences:			
Transferred to Military Studies building	$ 8,239 47		
Furniture written off by application of credit from Sales of Wild Lands set apart for Women's Residences	555 12		
		8,794 59	
			205,762 16
Return of 30 June, 1921			$5,992,014 78

SCHEDULE 8.

Unproductive Lands.

Vacant Land in Port Hope	$6,895 00	
Endowment Lands unsold in various townships	152 00	
U. C. C. Block on King Street	50,048 31	
		$57,095 31
Transactions. 1920-21.		
Upper Canada College Block:		
Taxes paid *re* widening of Duncan Street	27 89	
Return of 30 June, 1920	57,067 42	
Return of 30 June, 1921		$57,095 31

SCHEDULE 9.

Leased Properties.

Land leased to City of Toronto	$120,000 00	
Park Lots leased	418,621 40	
Toronto Business Properties	61,401 00	
Caradoc Farm	2,700 00	
		$602,722 40
House and land, 47 St. George Street	10,172 95	
House and land, 69 St. George Street	20,000 00	
Building, No. 719 Spadina Avenue	4,000 00	
Building No. 721 Spadina Avenue	4,023 51	
Building, No. 6 Queen's Park	3,626 50	
		$41,822 96
City of Toronto payment accrued	1,500 00	
Rentals accrued	10,029 84	
		11,529 84
		$656,075 20
Return of 30 June, 1920	$637,734 53	
Further payment upon purchase of No. 6 Queen's Park	468 67	
Addition to capitalized value upon renewal of lease, University Park:		
Part Lots 55 and 56	10,800 00	
Increase in rentals outstanding	7,072 00	
Return of 30 June, 1921		$656,075 20

SCHEDULE 10.

Investments, Cash and Accounts Receivable.

Debentures and Municipal Bonds	$197,149 16	
Interest accrued	2,779 67	
		$199,928 83
Loans secured by mortgages on real property	9,829 08	
Interest accrued	68 02	
		9,897 10
Unpaid purchase money upon land sales	24,150 00	
Interest accrued	376 77	
		24,526 77

Investments, Cash and Accounts Receivable.—Continued.

Canadian War Loan and Province of Ontario Bonds	$295,849 84	
Interest accrued	1,869 16	
		297,719 00
Home Bank of Canada shares		800 00
Dominion Power and Transmission Co. shares		2,000 00
Royal Ontario Museum Investment		251,002 80
Advances to Royal Ontario Museum:		
For share of salaries and expenses for the year 1920-21, payable by the Provincial Government	34,905 64	
Less Museum Special Account at credit	19,643 31	
		15,262 33
Balance unpaid on 30th June of special legislative grant of $880,000.00		$430,000 00
Accounts Receivable:		
University Press	13,719 77	
Department of Photography	123 65	
Connaught Laboratories	9,952 35	
Miscellaneous labor and material	5,241 21	
		29,036 98
Central Power Plant:		
Victoria College Account	19,851 07	
Wycliffe College Account	9,231 90	
Knox College Account	11,541 35	
Sundry items	26 00	
		40,650 32
		1,300,824 13
Less overdraft, Canadian Bank of Commerce		105,837 07
		$1,194,987 06

Transactions, 1920-21.

Inwards.

Debentures redeemed	$32,182 66	
Mortgage loans repaid	2,310 99	
Purchase money collections	3,500 00	
Withdrawals from Canadian Bank of Commerce	2,667,179 78	
Decrease in accrued revenue	661 39	
		2,705,834 82

Outwards.

War Loan Investments	5,000 00	
Deposits in Canadian Bank of Commerce	2,550,906 60	
Increase in accounts outstanding	414,036 59	
		2,969,943 19
		264,108 37
Return of 30 June, 1920,		930,878 69
Return of 30 June, 1921,		$1,194,987 06

APPENDIX II.

Fees, 1920-21

Balance brought forward from 1919-20		$460 00	
Total of fees collected, 1920-21		441,274 55	
			$441,734 55
Less deductions as follows:			
Sundry refunds during year		5,804 55	
Paid to Hart House, share of fees		23,376 00	
Paid to Men's Students' Administrative Council, Council fees		9,287 00	
Paid to Women's Students' Administrative Council, Council fees		2,939 00	
Paid to Hospitals, fees payable from Students in Medicine:			
Toronto General	7,165 00		
St. Michael's	1,286 65		
Sick Children's	1,703 31		
Western	1,153 31		
		11,308 27	
Transferred to Caput Fines		2 50	
Transferred to Microscopes Account		1,265 00	
Transferred to Public Health Nursing Account		2,878 00	
Transferred to University College Women's Union		2,097 00	
Fees paid in advance for 1921-22		955 00	
			59,912 32
			$381,822 23
Carried to Organ Fund (Schedule 6) surplus fees derived from Local Examinations in Music after payment of expenses			$1,434 76
Balance to Revenue Account (Schedule 6*a*)			380,387 47
			$381,822 23

Details of Fees Received 1920-1921

Faculties	Arts	Medicine	App. Science	Ont. College of Educ.	Forestry	Music		Total
						Mus. Bac.	L. E. M.	
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
Lecture Fees—								
General	44,708 50	130,239 55	74,082 00		2,013 00			251,043 05
Special Courses—								
Summer, 1920-21		2,240 00		310 00				2,550 00
Summer, in advance for 1921-22		20 00		30 00				50 00
Pædiatrics		270 00						270 00
Post Graduate				10 00				10 00
Post Graduate (December)		460 00						460 00
Post Graduate (May)		370 00						370 00
Review		140 00						140 00
Special Preparatory Courses (arrears)	570 60							570 60
Sundry Instruction	970 00							970 00
Teachers in Training				1,844 00				1,844 00
University Schools				25,099 00				25,099 00
Dispensations	60 00			100 00				160 00
Dispensations (University College)	140 00							140 00
Registration				378 00		185 00		563 00
Honor Certificates	78 00	5 00	1 00	14 00			559 25	657 25
Matriculation	4,395 40	85 00	25 00		5 00	20 00		4,530 40
Ad Eundem	100 00	130 00	120 00					350 00
Examinations	24,946 50	12,590 25	10,035 00	386 00	615 00	30 00	1,786 00	50,388 75
Degrees	3,320 00	2,480 00	1,345 00	40 00	60 00	60 00		7,305 00
Laboratory Supplies	2,664 00	6,927 00			378 00			9,969 00
Library	3,741 00	1,982 00	1,518 00	2 00	96 00			7,339 00
Gymnasium, Women's	1,121 00	28 00						1,149 00
Women's Union	2,050 00	44 00		3 00				2,097 00
Penalties (University College)	1,212 00							1,212 00
Penalties (University)	353 00	785 00	235 00		19 00	8 00		1,400 00
Hart House and Men's Students' Council	12,200 00	11,007 00	8,844 00	180 00	560 00			32,791 ,00
Women's Student's Council	2,577 00	245 00	3 00	114 00				2,939 00
Microscopes		1,265 00						1,265 00
Caput Fines (arrears)		2 50						2 50
	105,207 00	171,315 30	96,208 00	28,510 00	3,746 00	303 00	2,345 25	407,634 55

Details of Fees Received, 1920-1921—Continued

Departments	University Extension	Social Service	Pub. Health Nursing	Post Grad. Studies	Law	Dentistry	Pharmacy	Veterinary Science	Agriculture	Total
Lecture Fees		4,210 00	2,928 00	1,132 00				3,200 00		11,470 00
Summer Session:										
Lecture fees ($700. of which $460 was paid in 1919-20)	240 00									240 00
Lecture fees (in advance for 1921-1922)	903 00									903 00
Correspondence Courses	1,824 00									1,824 00
Teachers' Courses	1,707 00									1,707 00
Special Courses—										
Tutorial English	440 00									440 00
Winter Course	557 50									557 50
Political Economy	262 50									262 50
Journalism (in advance for 1921-1922)	2 00									2 00
Mental Hygiene, (arrears)		10 00								10 00
Registration				530 00						530 00
Matriculation					150 00	1,265 00	490 00	5 00		1,910 00
Ad Eundem						30 00				30 00
Examinations				625 00	250 00	6,305 00	1,196 00	160 00	58 00	8,594 00
Degrees				605 00	120 00	1,440 00	980 00	205 00	1,660 00	5,010 00
Library			6 00	2 00						8 00
Gymnasium, Women's		8 00	32 00			24 00				64 00
Penalties	1 00									1 00
Hart House and Men's Students' Council		11 00		66 00						77 00
	5,937 00	4,239 00	2,966 00	2,960 00	520 00	9,064 00	2,666 00	3,570 00	1,718 00	33,640 00

Classification of Services.

Lecture Fees:		
Arts	$45,678 50	
do Special Preparatory Courses	570 60	
Medicine	133,739 55	
Applied Science	74,082 00	
Ontario College of Education, Teachers in Training	2,194 00	
Ontario College of Education, University Schools	25,099 00	
Forestry	2,013 00	
Music	185 00	
University Extension	5,936 00	
Social Service	4,220 00	
Public Health Nursing	2,928 00	
Departmental	4,332 00	
Dispensations	300 00	
Honor Certificates	657 25	
Registration	908 00	
Matriculation	6,440 40	
Ad Eundem	380 00	
Examinations	58,982 75	
Degrees	12,315 00	
Laboratory Supplies	9,969 00	
Library	7,347 00	
Gymnasium, Women's	1,213 00	
Women's Union	2,097 00	
Penalties	2,613 00	
Hart House and Men's Students' Council	32,868 00	
Women's Students' Council	2,939 00	
Microscopes	1,265 00	
Caput Fines	2 50	
		$441,274 55

Recapitulation.

	Gross Receipts.	Refunds and other Deductions.	Net Amount.
University Fees proper	394,643 45	58,762 32	335,881 13
University College Fees proper	46,631 10	1,150 00	45,481 10
Balance brought forward from 1919-20	460 00	.....	460 00
	$441,734 55	59,912 32	381,822 23

APPENDIX III.

Revenue Expenditures. 1920-21.

	Appropriation.	Supplementary.	Unused.	Total
I. Administration:				
1. Salaries	$121,235 00		$2,998 16	$118,236 84
2. Pensions & Ret. Allowances	3,000 00			3,000 00
3. President's Office	350 00		4 90	345 10
4. Bursar's Office	4,400 00		692 11	3,707 89
5. Registrar's Office	6,050 00	180 06		6,230 06
6. Superintendent's Office	3,400 00	1,390 31		4,790 31
7. Library	42,975 00		12,762 99	30,212 01
8. Gymnasium, Students' Union and Athletics (Hart House)	10,350 00	1,683 64		12,033 64
9. Convocation Hall	3,725 00		296 27	3,428 73
10. Grounds	19,300 00		659 88	18,640 12
11. Protective Service	9,150 00		963 17	8,186 83
12. Examinations	19,000 00	4,336 23		23,336 23
13. Convocation Expenses	1,500 00	907 14		2,407 14
14. Receptions to Societies and University Visitors	3,000 00		488 34	2,511 66
15. Telephones	5,000 00		576 31	4,423 69
16. Insurance	12,000 00		1,140 07	10,859 93
17. Advertising Expenses	1,300 00	192 11		1,492 11
18. Aid to Publications and Societies	1,450 00		261 28	1,188 72
19. University Studies	3,000 00			3,000 00
20. Law Costs	1,250 00		1,166 88	83 12
21. Travelling Expenses	2,750 00		678 80	2,071 20
22. Senate Elections	1,600 00	1,668 15		3,268 15
23. Roll of Service	8,350 00		1,011 40	7,338 60
24. Alumni Association	5,300 00			5,300 00
	$289,435 00	$10,357 64	$23,700 56	$276,092 08
II. Faculty of Arts:				
25. Salaries	499,395 00		19,493 25	479,901 75
26. Main Building	23,800 00		9,520 17	14,279 83
27. Biological Building and Department	15,100,00		2,210 45	12,889 55
28. Department of Botany	7,700 00	3,501 96		11,201 96
29. Bio-Chemistry Department	6,500 00	410 57		6,910 57
30. Physiological Department	4,000 00	672 75		4,672 75
31. Chemical Building and Department	13,025 00		612 20	12,412 80
32. Sub-Department of Physical Chemistry	500 00		40 43	459 57
33. Physics Building and Department	16,250 00	1,856 70		18,106 70
34. Sub-Department of Astronomy	850 00		138 87	711 13
35. Geological Department	1,000 00		306 30	693 70
36. Minerological Department	1,569 00		21 03	1,547 97
37. Philosophical and Psychological Department	1,950 00		38 56	1,911 44
38. Mathematical Department	150 00		88 31	61 69
39. Sub-Department of Mechanics	400 00		67 44	332 56
40. Political Science Building and Department	2,360 00		610 08	1,749 92
41. History	75 00	256 75		331 75
42. Italian and Spanish	35 00	2 06		37 06
43. University College Departments	750 00		396 68	353 32
44. University College General Expenses	1,050 00		140 80	909 20
45. Trinity College Service	525 00	374 32		899 32
	$596,984 00	$7,075 11	$33,684 57	$570,374 54

Revenue Expenditures, 1920-21.

III. Faculty of Medicine:				
46. Salaries	$113,835 00		$5,531 41	$108,303 59
47. Anatomy	3,550 00		1,668 97	1,881 03
48. Pathology and Bacteriology	8,335 00	$89 26		8,424 26
49. Pathological Chemistry	2,250 00	1,285 64		3,535 64
50. Pharmacy and Pharmacology	2,220 00	1,430 03		3,650 03
51. Medicine	2,070 00		816 89	1,253 11
52. Surgery	600 00		408 53	191 47
53. Obstetrics and Gynæcology	300 00		238 01	61 99
54. Opthalmology	.....	.....	.....	.....
55. Oto-Laryngology	300 00		124 75	175 25
56. Therapeutics	100 00		46 55	53 45
57. Hygiene	2,600 00		98 17	2,501 83
58. Medical Jurisprudence	.....	.....	.....	.....
59. Medical Building	9,750 00		982 87	8,767 13
60. Pathological Building	10,525 00		311 33	10,213 67
61. General Expenses	3,800 00		167 96	3,632 04
62. Summer Session in Medicine and Special Post Graduate Courses	1,500 00	1,212 66		2,712 66
	$161,735 00	$4,017 59	$10,395 44	$155,357 15
IV. Faculty of Applied Science:				
63. Salaries	$208,390 00		$8,600 71	$199,789 29
64. Mining Building	9,350 00		1,550 14	7,799 86
65. Architectural Building (formerly Engineering Building, including Old Y.M.C.A. Building	22,200 00		733 86	21,466 14
66. Electrical Engineering Building, including Thermodynamics Building	9,100 00		2,907 50	6,192 50
67. Geodetic Observatory Building	930 00		195 76	734 24
68. Electrical Engineering	15,204 00		189 90	15,014 10
69. Mechanical Engineering	2,200 00		731 19	1,468 81
70. Applied Mechanics	2,650 00	$385 95		3,035 95
71. Mining Engineering	4,950 00		32 83	4,917 17
72. Metallurgical Engineering	9,100 00	387 75		9,487 75
73. Surveying	10,550 00		294 30	10,255 70
74. Applied Chemistry	10,750 00		424 54	10,325 46
75. Electro-Chemistry	11,900 00	139 06		12,039 06
76. Architecture and Drawing	3,910 00		2,599 02	1,310 98
77. Engineering Physics and Photography	2,000 00		1,054 47	945 53
78. General Expenses	3,700 00	831 34		4,531 34
	$326,884 00	$1,744 10	$19,314 22	$309,313 88
V. Faculty of Household Science:				
79. Salaries	$16,890 00		$3,750 00	$13,140 00
80. Household Science Building and Department	11,200 00		2,261 29	8,938 71
	$28,090 00		$6,011 29	$22,078 71
VI. Ontario College of Education:				
81. Salaries	$108,950 00		$3,492 50	$105,457 50
82. Education Building and Department	30,485 00		3,675 22	26,809 78
	$139,435 00		$7,167 72	$132,267 28

Revenue Expenditures, 1920-21.—Continued.

VII. Faculty of Forestry:				
83. Salaries	$14,100 00		130 75	$13,969 25
84. Forestry Building and Department	8,105 00		135 97	7,969 03
	$22,205 00		$266 72	$21,938 28
VIII. 85. Faculty of Music	$2,000 00		$293 82	$1,706 18
IX. University Extention and Social Service:				
86. University Extension	$14,200 00	$2,621 50		$16,821 50
87. Social Service Building and Dement	12,545 00		$257 52	$12,287 48
	$26,745 00	$2,621 50	$257 52	$29,108 98
X. Residences:				
88. Men's Residences	$9,950 00		$1,712 74	$8,237 26
89. Women's Residences	42,225 00		4,393 21	37,831 79
90. Dining Hall	.....	.....	.....	.....
91. University College Women's Union	19,362 00	2,357 97		21,719 97
	$71,537 00	$2,357 97	$6,105 95	$67,789 02
XI. 92. Royal Ontario Museum	$33,000 00			$34,905 64
XII. 93. Central Light, Heat and Power Plant	$136,200 00	$21,677 56		$157,877 56
XIII. 94. Contingencies and Miscellaneous	$10,000 00	$1,312 47		$11,312 47
XIV. 95. Capital Account Charges	$75,688 00		$81 33	$75,606 67
XV. 96. Special Courses for Returned Soldiers		$375 00		$375 00
XVI. 97. Special Research	$75,000 00		$3,587 23	$71,412 77

Recapitulation.

I. Administration	$289,435 00	$10,357 64	$23,700 56	$276,092 08
II. Faculty of Arts, University and University College	596,984 00	7,075 11	33,684 57	570,374 54
III. Faculty of Medicine	161,735 00	4,017 59	10,395 44	155,357 15
IV. Faculty of Applied Science	326,884 00	1,744 10	19,314 22	309,313 88
V. Faculty of Household Science	28,090 00		6,011 29	22,078 71
VI. Ontario College of Education	139,435 00		7,167 72	132,267 28
VII. Faculty of Forestry	22,205 00		266 72	21,938 28
VIII. Faculty of Music	2,000,00		293 82	1,706 18
IX. University Extension and Social Service	26,745 00	2,621 50	257 52	29,108 98
X. Residences	71,537 00	2,357 97	6,105 95	67,789 02
XI. Royal Ontario Museum	33,000 00	1,905 64		34,905 64
XII. Central Light, Heat and Power Plant	136,200 00	21,677 56		157,877 56
XIII. Contingencies and Miscellaneous	10,000 00	1,312 47		11,312 47
XIV. Capital Account Charges	75,688 00		81 33	75,606 67

Recapitulation.—Continued

XV. Special Courses for Returned Soldiers		$375 00		$375 00
XVI. Special Research	$75,000 00		$3,587 23	$71,412 77
	$1,994,938 00	$53,444 58	$110,866 37	$1,937,516 21
			53,444 58	
			57,421 79	
	$57,421 79			
Total expenditure under appropriations	$1,937,516 21			

I. Administration.

I. *Salaries.*

President's Office.

Sir Robert Falconer, K.C.M.G., President, 12 mos. to 30 June (with free house, heat and light)	$10,000 00	
Miss A. W. Patterson, President's Secretary, 12 mos. to 30 June (paid also $200 as Secretary, Faculty of Music)	2,000 00	
		$12,000 00

Bursar's Office.

F. A. Mouré, Bursar, 12 mos. to 30 June (paid also $250 in Music)	$5,250 00	
Accounts Branch:		
C. E. Higginbottom, Accountant, 12 mos. to 30 June	2,400 00	
J. P. Jones, Appropriations Ledger Clerk, 12 mos. to 30 June	1,500 00	
Miss M. Smyth, Voucher Clerk, etc., 12 mos. to 30 June	1,200 00	
Miss J. H. Branton, Clerk, 12 mos. to 30 June	1,100 00	
Miss E. Long, Typist, etc., 12 mos. to 30 June	900 00	
Fees Branch:		
H. J. Bolitho, Fees Clerk, 12 mos. to 30 June	2,200 00	
Record Clerks, each 12 mos. to 30 June:		
Miss E. B. Goodwin	1,400 00	
Miss E. Grew	900 00	
Secretarial Branch:		
Miss A. M. Gall, Chief Clerk, 12 mos. to 30 June	1,800 00	
Miss M. Pyper, Assistant, 12 mos. to 30 June	1,000 00	
Miss M. Burns, Stenographer, 11 mos. to 30 June, @ $1,000 per annum	916 67	
		$20,566 67

Registrar's Office.

James Brebner, Registrar, 12 mos. to 30 June	5,000 00	
A. B. Fennell, Assistant Registrar, 12 mos. to 30 June	3,100 00	
A. T. Laidlaw, Assistant, 12 mos. to 30 June	2,500 00	
H. J. Strong, Assistant, 22 Sept. to 30 June @ $1,500 per annum	1,162 50	
Miss E. Hargreaves, Desk Assistant, 12 mos. to 30 June	1,300 00	
Miss N. MacKenzie, Minute Clerk (including services as secretary to Graduate Board) 12 mos. to 30 June	1,500 00	
Clerks, each 12 mos. to 30 June:		
Miss M. McMillan	1,375 00	
Miss A. S. Meen	1,375 00	
Stenographers, each 12 mos. to 30 June:		
Miss E. M. Sharpe	1,250 00	
Miss J. R. White	1,250 00	
Miss E. M. Fasken	800 00	
Register Clerks:		
Miss E. Keys, 12 mos. to 30 June	1,125 00	
Miss A. MacGillivray, 6 mos. from 1 January @ $1,300 per annum (transferred from Roll of Service)	650 00	

1. *Salaries.—Continued.*

Miss F. Hahn, 5 mos. to 30 June @ $60 per month	$300 00	
Miss Alice Dunnett, Filing Clerk, 12 mos. to 30 June	900 00	
		$23,587 50

Superintendent's Office.

A. D. LePan, Superintendent of Buildings and Grounds, 12 months to 30 June	$4,800 00	
W. H. Bonus, Assistant Superintendent, 12 months to 30 June	2,500 00	
W. L. D. Carnie, Chief Clerk, 12 months to 30 June	1,600 00	
Miss J. Bell, Clerk, 12 months to 30 June	1,200 00	
Miss M. Edgar, Stenographer, 12 months to 30 June	1,200 00	
		$11,300 00

Library.

H. H. Langton, Librarian, 12 months to 30 June (paid also $200 as Editor, University Studies)	$5,000 00	
W. S. Wallace, Assistant Librarian, 12 months to 30 June (paid also $1,000 in History)	2,500 00	
Assistants, each 12 months to 30 June:		
Miss G. Buchan	1,800 00	
Miss H. Young	1,800 00	
Miss L. M. Mason	1,600 00	
Miss M. L. Newton	1,400 00	
Miss H. Fairbairn	1,375 00	
Miss E. V. Bethune	1,375 00	
Miss E. Creighton	1,375 00	
Miss H. G. B. Woolryche	1,375 00	
Mrs. A. C. Jones	1,375 00	
Miss A. M. Cordingley	940 00	
Miss E. Aldridge	1,200 00	
Miss A. E. Stennett	1,200 00	
Miss I. Edwards	1,000 00	
Miss H. C. Wrightman	940 00	
Miss C. B. MacFayden	940 00	
Assistants @ $940 00 per annum:		
Miss M. Burgess, 1 July to 16 October (resigned)	274 17	
Miss M. MacFayden, 15 November to 30 June	587 51	
Miss M. A. Dickinson, 2½ months	200 99	
S. H. Fussell, Attendant (with rooms, heat and light valued at $420 00 as caretaker of building) 12 months to 30 June	1,200 00	
		$29,457 67

Gymnasium.

J. W. Barton, Physical Director, 12 months to 30 June	3,600 00	
T. A. Reed, Financial Secretary, 12 months to 30 June (charged to receipts from Athletic Field)	3,300 00	
D. M. Barton, Gymnasium Instructor, 10 months' salary	2,350 00	
W. W. Winterburn, Swimming Instructor, 10 months' salary ..	1,900 00	
A. Williams, Instructor, 12 months to 30 June (reduced service), $550 00: Instruction in Fencing, 15 weeks @ $10 00, $150 00	700 00	
Part-time Instructors:		
A. Francis, 30 weeks @$15 00	450 00	
W. Knox, 4 weeks @ $37 50	150 00	
A. Durnan, 10 weeks @ $15 00	150 00	
F. Halbus (paid also in Ontario College of Education)	150 00	
Locker Attendants, each 12 months to 30 June:		
George Hare	1,250 00	
W. Rimmer	1,250 00	
		$15,250 00

Graduate Studies.

Professor J. P. McMurrich, Honorarium as Chairman	$300 00	
		$300 00

1. *Salaries.*—Continued.

Military Studies.

Professor W. R. Lang, Director, 12 months to 30 June	$5,700 00	$5,700 00

General Service.

S. J. Apted, services as Beadle, 12 months to 30 June, (paid also $825 00 as caretaker of Convocation Hall, and $300 00 for supervising Architectural building)	125 00	
A. Bain, Attendant and Messenger, President's Office, 12 months to 30 June	1,150 00	
J. Christie, Chief Officer of Discipline, 12 months to 30 June, $2,000 00; allowance credited to Pension Fund for year, $100 00	2,100 00	3,375 00
		$121,536 84
Less charged to Athletic Field receipts		3,300 00
		$118,236 84

2. *Pensions and Retiring Allowances.*

Mrs. Julia Loudon, Ex-President's widow, annual pension	2,500 00	
Professor A. McPhedran, allowance as Emeritus Professor	500 00	$3,000 00

3. *President's Office.*

Office supplies, postage, printing and incidentals ($345 10):		
President Sir Robert Falconer, sundry disbursements	47 57	
Librairie Beauchemin Limitee, repairs	12 00	
Office Specialty Mfg. Co., cases, folders, etc.	16 04	
Ryerson Press, printing report	165 24	
University Press, printing and stationery	104 25	$345 10

4. *Bursar's Office.*

Office supplies, postage, printing and incidentals ($2,474 56):		
Burroughs Adding Machine, inspection	23 40	
The Bursar, petty disbursements, $122.00; postage, $305.00	427 00	
Elliott-Fisher Ltd., inspection and repairs	4 60	
Five-in-One Letter Envelope Co., envelopes	25 50	
Grand & Toy, keys, $1 00; cheque books, $131 00; stamps on same, $240 00	372 00	
C. W. Mack, date stamps	8 12	
Might Directories, city directory	15 30	
Munson Supply Co., keys	5 63	
Office Specialty Mfg. Co., desks, $286 46; folders, chairs, etc., $94 45	380 91	
Students' Book Dept., almanacs	4 50	
United Typewriter Co., ribbons and repairs	16 50	
University Press, printing and stationery	1,179 43	
Petty items (2)	4 35	
Freight charges	7 32	
Clerical assistance ($33 33):		
Jack McLaren, 1 month	33 33	
Auditor's remuneration ($1,200 00):		
G. T. Clarkson, for year ending 30 June	1,200 00	$3,707 89

5. *Registrar's Office.*

Office supplies and stationery ($1,454 46):		
Might Directories, city directory	15 30	
Office Specialty Mfg. Co., desks $205 00; transfer cases folders, etc., $166 88.....	371 88	

5. *Registrar's Office.*—Continued.

United Typewriter Co., typewriter, $104 60; repairs, $34 65	$139 25	
University Press, printing and stationery	897 80	
Superintendent's Dept., labour, $6 06; material, $2 62	8 68	
Postage ($1,244 00):		
The Bursar, postage supplied	1,244 00	
Clerical assistance ($30 00):		
Miss F. J. Hargreaves, 2 weeks @ $15 00	30 00	
Printing, other than Calendar ($341 15):		
University Press	341 15	
Printing Calendar and Curricula ($3,160 45):		
University Press	3,160 45	
		$6,230 06

6. *Superintendent's Office.*

Office supplies, postage, printing and incidentals ($1,187 21):		
Art Metropole, scale	$1 98	
The Bursar, postage supplied	165 00	
C. F. Cole Co., drawing material	8 22	
Copeland, Chatterson Ltd., binder	5 20	
Evening Telegram, advertising	9 98	
Grand & Toy, journal, etc.	4 50	
C. W. Mack, rubber stamps, repairs, etc.	16 70	
J. W. Nelson, plans, etc.	23 50	
Office Speciality Mfg. Co., transfer cases, etc.	38 76	
Photography, Dept. of, blue-prints	3 40	
Students' Book Dept., books	7 70	
The Superintendent, gratuity to postman, $3.00; sundry accounts, $5.64	8 64	
United Typewriter Co., inspection and repairs	36 75	
University Press, printing and stationery	849 65	
Petty items (3)	7 23	
Motor Car ($1,123.25):		
A. D. Gorrie & Co., Ford Coupe and accessories	1,123 25	
Incidental expenses re work on buildings ($1,162.61):		
Sundry labour	1,162 61	
Clerical assistance ($1,331.04):		
Miss Dyke, 6 days at $5.00	30 00	
Miss A. Osborne, 34 weeks, 1 day, at $15.00 per week	512 50	
Miss K. Pearson, 1 week	25 00	
Miss E. Watson, 2 weeks, 1 day, at $14.00 per week	30 33	
Miss E. S. Wooldridge, 6 weeks, 1 day, at $15.00 per week, $92.50; 19 weeks, 2 days, at $16.00 per week, $308.57	401 07	
Miss A. Wynne, 22 weeks, 1 day, at $15.00 per week	332 14	
	$4,804 11	
Less sale of plans, etc.	13 80	
		$4,790 31

7. *Library.*

(*a*) Maintenance of Building:		
Heat and light (supplied from Central Power Plant)		
Gas (54.20):		
Consumers' Gas Co.	$54 20	
Water (174.62):		
City Treasurer	174 62	
Caretaker's supplies ($128.90):		
Superintendent's Dept., labour, $3.80; material, $125.10	128 90	
Cleaning ($1,253.40):		
Canadian Cleaning Co., cleaning windows	30 00	
Superintendent's Depa., labour	1,223 40	
Repairs and renewals ($1,553.43):		
Wm. Bartlett & Son, shades	87 93	
City Treasurer, elevator license	5 00	
and repairs	299 70	

7. *Library.*—Continued.

Johnson Temperature Regulating Co., installation		
R. Robertson & Sons, pointing-up masonry	$22 75	
Superintendent's Dept., labour, $742.53; material, $395.52	1,138 05	
Fitting up rooms in basement ($4,038.04):		
Alderson, Hammond & Ritchey, rough-surfacing floors	101 10	
T. Eaton Co., linoloum	613.80	
Johnson Temperature Regulating Co., installing thermostats	265 00	
Routery Bros., lathing and plastering	40 60	
Robt. Simpson Co., chairs	118 00	
Superintendent's Dept., labour, $1,873.24; material, $1,026.30	2,899 54	
		$7,202 59

(*b*) General Library Appropriation:

Books and periodicals, binding and office supplies ($18,453.40):		
Academy of Political Science	$5 73	
E. G. Allen & Son	2,558 72	
American Academy of Political and Social Service	11 41	
American Anthropological Association	6 87	
American Architect	9 73	
American Association for the Advancement of Science	6 17	
American Association for Labour Legislation	5 66	
American Ceramic Society	8 52	
American Chemical Society	17 14	
American Concrete Institute	8 96	
American Economic Association	5 63	
American Folk Lore Society	3 00	
American Genetic Association	28 78	
American Historical Society	7 54	
American Institute of Electrical Engineers	6 69	
American Institute of Mining and Metallurgical Engineers	11 97	
American Journal of Physical Anthropology	5 89	
American Journal of Physiology	16 78	
American Journal of School Hygiene	9 34	
American Journal of Science	9 27	
American Library Association	5 80	
American Mathematical Society	8 01	
American Medical Association	33 47	
American Microscopical Society	2 30	
American Ornithologists Union	3 61	
American Philological Association	4 01	
American Political Science Association	4 55	
American School Board Journal	4 03	
American Society of Civil Engineers	20 56	
American Society for Testing Materials	13 74	
American Statistical Association	3 38	
American Waterworks Association	7 87	
Annals of Medical History	8 99	
Annals of Surgery	8 99	
Archaeological Institute of America	17 58	
Architectural Forum	7 75	
Architectural Review	2 28	
Arts and Decoration	6 79	
Association for the Study of Internal Secretions	12 36	
R. R. Bowker Co.	13 34	
British School of Archaeology in Egypt	32 40	
Albert Britnell	19 73	
F. A. Brockhaus	986 82	
Builders' Journal	2 88	
Cadmus Book Shop	14 23	
Canadian Annual Review, Ltd.	4 58	

Library.—Continued.

Carswell Co. Ltd.	$18 50
C. D. Cazenove & Son	1,280 39
J. Chambeau	7 23
Champlain Society	10 00
Florence Chandler	16 19
Chemical, Metallurgical and Mining Association of South Africa	10 27
Chivers Book Binding Co.	9 34
Cedric Chivers Ltd.	126 56
J. Clark Co.	78 41
Class Journal Co.	5 74
Commercial and Financial Chronicle	12 91
Coults & Co.	13 01
Wm. Dawson & Sons	36 47
Department of Public Printing and Stationery, Ottawa	3 00
"Ecology"	3 47
Egypt Exploration Society	57 96
Electrical World	7 46
Electric Journal	2 25
"El Sol"	4 30
Engineering and Contracting	4 65
Engineering News Record	2 05
F. A. Faxon Co.	17 47
H. G. Fiedler	2 45
Buchhandlung Gustav Fock	47 80
Friedman's	113 28
J. Gamber	33 54
Gouthier-Villars	81 18
Gaylord Bros.	12 45
Geological Society of America	24 27
Wm. J. Gerhard	14 60
Good Roads	4 51
Otto Havasowitz	204 72
Harvard Law Review Association	5 38
Harvard University Press	3 44
A. Herman & Fils	17 54
H. M. Stationery Office	26 93
Historical Outlook	2 31
Historic Landmarks Association of Canada	5 00
Ulrico Hoepli	84 22
D. R. Hooker	6 82
Johns Hopkins Press	35 50
House and Garden	6 73
Institut de Palæontologie Humaine	7 20
Institute of Mining and Metallurgy	2 02
International Journal of Ethics	3 44
Iron Age	9 72
Iron Trade Review	9 61
Journal of Educational Research	4 66
Journal of Geography	2 60
Journal of Home Economics	2 53
Journal of Physical Chemistry	4 59
Milton G. Lange & Co.	12 83
L'Archivum Romanicum	8 63
Chas. E. Lauriat Co.	19 61
Librairie Honore Champion	22 36
Librairie Scientifique	23 51
Library of Congress	14 95
Libreria de Melchior Garcia	57 72
Libreria Internazionale	9 87
Linnean Society of London	10 58
Longmans, Green & Co.	6 02
A. C. McClurg & Co.	12 67
McGraw, Hill Co.	51 98
G. E. Mackenzie	40 94

7. *Library.*—Continued.

H. C. MacLean Ltd.	$6 00
McLean Publishing Co.	7 00
R. C. MacMahon	16 75
Macmillan Co. of Canada	10 41
W. E. Macpherson	4 00
Manual Training Magazine	2 10
Marine Biological Laboratory	6 88
Mathematical Association of America	5 81
Mineralogical Society of America	3 38
Mining Magazine	4 07
Mining and Scientific Press	5 75
Monetary Times	3 00
C. V. Mosby Medical Book Publishing Co.	7 27
National Geographic Society	5 16
National Historical Society	5 73
National Municipal League	5 61
National Tax Association	5 63
National Weekly Corporation	6 19
The Nautilus	2 26
Thos. Nelson & Sons	11 61
The New Republic	6 19
New York Botanical Garden	4 54
M. V. Martinus Nijhoff	16 70
North American Review	6 30
Ontario Library Association	5 00
Palmer Co.	4 76
Physical Review	8 04
Auguste Picard	8 78
Popular Educator	2 54
Primary Education	2 54
Psychological Review Co.	26 44
Public Works, N. Y.	4 58
G. P. Putnam's Sons	20 32
Quarterly Journal of Economics	5 82
Railway Age	9 15
Ray Society	4 21
The Revel	2 50
Harold Reeves	85 83
Rockefeller Institute for Medical Research	31 98
Romanic Review	3 59
Royal Statistical Society	6 68
Russell Sage Foundation	8 57
Porter E. Sargent	4 05
School Arts Magazine	3 66
The Science Press	11 92
Leonard Scott Publication Co.	35 42
Simmons-Boardman Publishing Co.	11 23
Society of American Forestry	9 15
Society of Automotive Engineers	6 96
Society of Chemical Industry	10 68
South African Mining Journal Syndicate	7 58
G. E. Stechert & Co.	17 24
Students' Book Dept.	1,950 80
Victoriana Suarez	138 61
Surgical Publishing Co.	13 47
The Survey	6 47
J. Terquem	1,129 54
Tientsin Press Ltd.	14 02
Union Library Association	4 34
University of Chicago Press	49 15
United Publishers of Canada Ltd.	7 00
Warwick & York	12 11
Williams & Wilkins Co.	90 21
Wistar Institute of Anatomy and Biology	90 66
Yale University Press	5 63

7. *Library.*—Continued.

Sundry small accounts (20)	$29 65	
The Bursar, postage supplied	273 00	
The Librarian, disbursements: book deposits refunded, $158.00; cables, $8.22; car tickets, cartage and sundries, $14.68; to be accounted for in 1921-22, $68 89=$249.79; less charged to previous year, $11.61	238 18	
Miss C. Adams, clerical assistance, 32 days at $80.00 per month	85 33	
Aikenhead Hardware Ltd., hardware	352 80	
Allen Mfg. Co., laundry	22 03	
Art Metropole, supplies	4 50	
D. A. Balfour Co., stationery	7 21	
Canadian National Institute for the Blind, brooms	8 25	
T. Eaton Co., felt, etc.	15 85	
Grand & Toy Ltd., desk and supplies	117 10	
J. F. Hartz Co., set of medical clinics	16 00	
Milton G. Lange & Co., shipping charges on books	132 98	
Lowe Martin Co., cards	134 64	
C. W. Mack, date stamps and pads	14 88	
Might Directories Ltd., city directory	15 30	
Office Specialty Mfg. Co., typewriter stand, etc.	37 74	
Remington Typewriter Co., typewriter	129 60	
W. H. Smith & Son, binding	26 57	
Students' Book Dept., note books	45	
United Typewriter Co., inspection and supplies	40 45	
W. S. Wallace, expenses re visit to American Libraries, etc.	529 40	
University Press, binding, $3,761.00; printing and stationery, $430.47	4,191 47	
Freight charges, etc.	1,046 94	
Superintendent's Dept., labour, $93.06; material, $68.26	161 32	
	$18,453 40	
Purchase and binding of arrears of periodicals ($4,363.48):		
F. A. Brockhaus, books	3,987 78	
Freight charges, etc.	375 70	
(c) Completion of book stack:		
Superintendent's Dept., labour, $201.89; material, $639.41	841 30	
	$23,658 18	
Less graduates' deposits, $253.00; fines, $289.05; replacement of books lost, $77.33; subscriptions to and sale of, $23.67; sundries, $5.71	648 76	
		$23,009.42
		$30,212 01

8. *Gymnasium, Students' Union and Athletics.*

(a) Maintenance of Building:		
Secretary-Treasurer, Hart House, University's share for Gymnasium portion	$2,500 00	
(b) Athletics:		
Gymnastic appliances, etc. ($269.96):		
J. Brotherton, ball repaired	2 75	
B. Cairns, Ltd., stamp	85	
T. Davis, basketball	7 00	
Ingram & Bell, bandages, etc.	53 11	
A. G. Spalding Bros., polo balls	30 30	
Students' Book Dept., book	3 00	
Frank Williams, signs	5 05	

8. Gymnasium, Students' Union and Athletics.—Continued.

Harold A. Wilson, tape, pumps, etc.	$5 66
University Press, printing	56 40
Superintendent's Dept., labour, $67.66; material, $38.18	105 84
Instruction in Swimming (including women students) ($1,400.00):	
G. H. Corsan, services as instructor	1,400 00
Physical Instruction to Women Students ($2,089.14):	
Miss I. Coventry, instructress	1,500 00
Dr. Edna Guest, examiner	200 00
Miss E. J. Craig, pianist	47 00
H. A. Wilson, nets, etc.	3 91
Superintendent's Dept., labour, $38.14; material, $150.29	188 43
Women's Athletic Association, University College account:	
Farmer Bros., photos of Team	13 50
F. Hanmer, attendant at meetings	3 50
Torontonensis article	32 50
University of Toronto Athletic Association, hockey privileges	40 00
University College Women's Athletic Associaton League fees	7 50
Women's Athletic Association, Victoria College account:	
J. Brotherton, hockey sticks, etc.	20 55
F Hanmer, attendant at meetings	18 00
H. A. Wilson, crests	14 25
(*c*) Physical Training ($3,760.78):	
F. H. Blake, gymnasium instructor, 10 months' salary	$2,100 00
Bruce Durnan, clerk (for attendance) 8 months' salary	800 00
J. S. R. Donaldson, clerk and stenographer, 7 months' salary	315 00
L. R. Ballantyne, clerk (for attendance) 7 months' salary	280 00
A. L. MacLean, pianist's services	198 33
Attendance record and card system ($67.45):	
University Press, printing and stationery	67 45
(*d*) Military Studies Building ($1,774.95):	
Heat and light ($564.81):	
Consumers' Gas Co., gas	36 01
Cox Coal Co., coal	502 81
Ridout & Bethune, teaming	25 99
Water ($24.60):	
City Treasurer	24 60
Caretaker's supplies ($61.54):	
Superintendent's Dept., material	61 54
Cleaning ($278.28):	
Canadian Cleaning Co., cleaning windows	3 28
Superintendent's Dept., labour	275 00
Repairs and renewals ($356.03):	
University Press, name plate	15
Superintendent's Dept., labour, $266.78; material, $89.10	355 88
Converting rooms, etc. ($489.69):	
Superintendent's Dept., labour, $315.95; material, $173.74	489 69
(*e*) Department of Military Studies ($258.25):	
W. R. Lang, petty disbursements	9 90
C. W. Mack, stamp	75
McKay School Equipment, blackboard	3 29
Photography, Dept. of, slides	31 60
Students' Book Dept., books	18 00
United Typewriter Co., rental and machine	121 50
Vendome Auctioneer, desk	16 00

8. Gymnasium, Students' Union and Athletics.—Continued.

University Press, printing and stationery	$26 40	
Superintendent's Dept., labour, $18.36; material, $12.45	30 81	
	12,053 08	
Less credit—water	19 44	
		$12,033 64

9. Convocation Hall.

Heat and light (supplied from Central Power Plant):		
Water ($120.90):		
City Treasurer	$120 90	
Caretaker's supplies ($196.90):		
Superintendent's Dept., labour, $3.17; material, $193.73	196 90	
Cleaning ($1,032.66):		
Allen Mfg. Co., laundry	41	
Canadian Cleaning Co., cleaning windows	34 00	
Superintendent's Dept., labour	998 25	
Repairs and renewals ($1,826.36):		
Superintendent's Dept., labour, $1,336.36; material, $490.00	1,826 36	
Caretaker, S. J. Apted, 12 months to 30 June (with house, heat and light)	825 00	
	4,001 82	
Less amount received from Societies, etc., (net)	573 09	
		$3,428 73

10. Grounds.

Labour, gravel, roadways, granolithic walks, flowers and shrubs ($17,718.73):		
Aikenhead Hardware Co., hardware	$583 56	
Asphaltic Concrete Co., repairing roads	1,561 16	
Auto Tire Steam Vulcanizing Co., tires, tubes, etc.	4 65	
Britnell & Co., cement	54 53	
Brobst Forestry Co., moving trees	44 70	
City Treasurer, water	58 03	
W. H. Cox Coal Co., fuel	33 80	
Dunlop Tire & Rubber Goods Co., hose, etc.,	79 03	
G. V. Dunn, tires, etc.	80 00	
T. Eaton Co., tubes, etc.	29 00	
R. & J. Farquhar Co., plants	64 42	
J. T. W. Low, harness and repairs	5 35	
J. H. McCabe, fodder	140 10	
J. J. Milligan, flowers	182 00	
Dr. J. N. Pringle, veterinary services	16 50	
Provincial Treasurer, auto license	18 00	
John T. Ransom, surveying	185 00	
Rice Lewis & Sons, lawn mowers	86 57	
R. Robertson & Son, building concrete walk, culvert, etc.	487 72	
Thos. Robin, teaming, 41 hours @ $1.25 per hour	51 25	
John Rydall, horseshoes	129 10	
J. A. Simmers, Ltd., seeds	109 50	
Steele Briggs Seed Co., supplies	204 90	
W. H. Thomson, teaming	365 00	
Universal Car Co., motor accessories	133 71	
A. Waine, hay	55 53	
Petty items (4)	5 45	
Superintendent's Dept., labour, $11,683.84; material, $1,266.33	12,950 17	
	$17,718 73	
Less received from sale of wood, etc., $205.70; fine, $3.00; cartage, $164.91; use of tennis court, $5.00	378 61	
	17,340 12	
Foreman Gardener, G. Trotter, 12 months to 30 June	1,300 00	
		$18,640 12

11. *Protective Service.*

Pay of constables and nightwatchmen, each 12 months to 30 June ($7,896.61):		
D. Forbes	$1,200 00	
R. D'Arcy	1,200 00	
H. Diwell	1,200 00	
C. Fairbrass	1,200 00	
G. Iliff	1,200 00	
J. Banford (part time)	763 28	
W. Pike (part time)	1,133 33	
Uniforms, clock dials and other expenses ($290.22):		
D. S. Buddo, time slips	3 69	
T. Eaton Co., coats	18 50	
Hardinge Bros. of Canada, clock dial	3 54	
Ontario Tailoring Co., uniforms	188 00	
Superintendent's Dept., labour, $54.85; material, $21.64...	76 49	
		$8,186 83

12. *Examinations*

Name	Remuneration as Examiner	Expenses	Presiding Examiner	Attendants	Total
Aldous, J. E. P.	51 20	7 00			58 20
Alexander, W. J	5 25				5 25
Allan, F. B	25 25				25 25
Anderson, G. R	14 00				14 00
Angus, R. W	5 00				5 00
Ardagh, E. G. R	28 00				28 00
Arkley, L. M	11 25				11 25
Armour, R. G	55 00				55 00
Armstrong, H. G				19 50	19 50
Atkinson, G. D	55 30	21 25			76 55
Auger, C. E			30 00		30 00
Awde, E. O		2 10	2 00		4 10
Aylesworth, F. A	45 00				45 00
Baillie, W. H. T			32 50		32 50
Bain, J. W	16 00				16 00
Baldwin, L. C. M			7 50		7 50
Ballard, W. H		4 00	4 00		8 00
Barley, E. B				37 50	37 50
Batt, H. E	10 00				10 00
Beatty, S	30 76		54 00		84 76
Bell, J. S				19 50	19 50
Bennett, S. G			92 50		92 50
Bensley, B. A	19 50				19 50
Bingham, G. A	50 00				50 00
Blackwood, W. C	6 00				6 00
Bluethner, W. A	10 00	3 00			13 00
Boswell, M. C	6 00				6 00
Bott, E. A	2 63				2 63
Brebner, F. R		5 00			5 00
Brebner, Miss M			117 00		117 00
Brebner, W. B			2 50	13 75	16 25
Brett, G. S	10 50				10 50
Briggs, A. W	21 00				21 00
Brittain, C. L				45 00	45 00
Brown, Allan	36 50				36 50
Brown, A. Grant	17 00				17 00
Bruce, G				46 25	46 25
Bruce, H. A	45 00				45 00
Buchanan, M. A	13 00				13 00
Burton, E. F	35 75				35 75
Butler, T. B				4 50	4 50
Caesar, L	17 00				17 00
Cameron, I. H	7 50				7 50
Cameron, M. H. V	55 00				55 00
Campbell, W. R	45 00				45 00
Carruthers, A	5 25				5 25
Chant, C. A	5 25				5 25
Clarkson, F. A	45 00				45 00
Clarkson, W. H	33 50		99 00		132 50
Clemens, W. A	21 75				21 75
Clute, A. R	18 00				18 00
Clutterbuck, H. E	100 00				100 00
Cochrane, C. N	24 75		58 50		83 25
Cockburn, J. R	12 25				12 25
Cole, C. E. C	50 00				50 00
Collins, H		2 50			2 50

12. *Examinations.*—Continued

Name	Remuneration as Examiner	Expenses	Presiding Examiner	Attendants	Totals
Cook, W. A			60 00		60 00
Coombs, F. E			81 00		81 00
Cornish, G. A			22 50		22 50
Coutts, G. J	13 80				13 80
Craigie, E. H			50 00		50 00
Crawford, A. R				25 00	25 00
Crawford, J. T			50 00		50 00
Crerar, S. R	8 25				8 25
Crow, J. W	17 00				17 00
Cullingford, W. E. G				54 00	54 00
Currelly, C. T	5 25				5 25
Curzon, S. R			70 00		70 00
Dale, E. A	14 00		41 50		55 50
Dancey, W. A			25 00		25 00
Daniher, E. L			72 00		72 00
Davis, H. H	45 00				45 00
Dean, H. H	28 00				28 00
Deanness, John		4 00	4 00		8 00
Defries, R. D	10 75				10 75
De Lury, A. T	15 75				15 75
De Pencier, R. F. W				15 00	15 00
Deweiler, H. K	60 00				60 00
Duff, David	8 50		30 00		38 50
Duff, G. H	29 25		2 50		31 75
Dunbar, W. B			60 00		60 00
Dundas, G. A				36 00	36 00
Edgar, Pelham	44 25				44 25
Elliott, J. H	45 00				45 00
Evans, G. A	58 00				58 00
Evans, M. G				34 50	34 50
Fairclough, W. E	25 60	7 00			32 60
Ferguson, F. L	9 63				9 63
Fessenden, C			5 00		5 00
Fields, J. C	13 25				13 25
Findlay, Edith	11 00				11 00
Fitzgerald, J. G	29 00				29 00
Fenley, Ralph	5 00				5 00
Fletcher, A. A	60 00				60 00
Forsyth, W. O	15 00	3 20			18 20
Found, N			27 00		27 00
Fowler, W. J. R	10 00				10 00
Franklin, H. J			65 00		65 00
Frawley, N. D	45 00				45 00
Fricker, A. H	31 50				31 50
Frisby, W. G	6 00				6 00
Fulmer, H. L	35 00				35 00
Funnell, W. S	16 75		2 50		19 25
Gaby, R. E	45 00				45 00
Gallie, J. G	45 00				45 00
Gallie, W. E	95 00				95 00
Gibson, A. L	46 75				46 75
Gillespie, P	5 50				5 50
Gilmour, C. H	45 00				45 00
Goldie, Wm	106 25				106 25
Goldsmith, P. G	45 00				45 00
Graham, Duncan	10 50				10 50
Graham, R. R	34 13		72 00		106 13
Graham, Roscoe R	55 00				55 00
Graham, T. S			12 50		12 50
Graham, W. R	43 25				43 25

12. *Examinations*—Continued

Name	Remuneration as Examiner.	Expenses	Presiding Examiner	Attendants	Total
Green, L. A.		2 00	2 00		4 00
Guess, G. A.	11 75				11 75
Guest, W. S.	5 75		57 50		63 25
Gwatkin, R.	25 00				25 00
Gwyn, N.	45 00				45 00
Ham, A.	78 50	3 50	2 00		84 00
Harcourt, R.	66 50				66 50
Harris R. I.	45 00				45 00
Harrison, H. D.	45 00				45 00
Harrison, J. W. F.	18 00				18 00
Hastings, C. E.			67 50		67 50
Haughton, W.				27 00	27 00
Hay, S. M.	45 00				45 00
Heebner, C. F.	116 75				116 75
Henderson, V. E.	13 50				13 50
Hendry, W. B.	145 00				145 00
Hendry, L. J.				5 00	5 00
Hewlett, W. H.	42 40	5 25			47 65
Howe, C. D.	5 25		7 50		12 75
Howitt, J. E.	62 00				62 00
Howland, G. W.	45 00				45 00
Hunter, A.	44 25				44 25
Hurst, R. O.	58 50				58 50
Hutchison, H. S.	60 00				60 00
Irwin, J. A.			54 00		54 00
Irwin, R. J.				34 50	34 50
Irwin, W. A.	10 75		10 00		20 75
Jackson, G. E.	34 00				34 00
Jackson, K. B.			42 50		42 50
Jackman, W. T.	5 00				5 00
Jamieson, A. F.				17 50	17 50
Jamieson, R.	45 00				45 00
Jeanneret, F. C. A.	8 50		85 50		94 00
Jones, D. H.	38 00				38 00
Jones, Isabel			49 50		49 50
Kelleher, J.			42 50		42 50
Kenrick, F. B.	30 25				30 25
Keyes, N. A.	36 50				36 50
Kihl, V.	63 20	21 20			84 40
King, J. T.	5 25				5 25
Kirkpatrick, Marjorie L.			7 50		7 50
Kirkwood, W. A.	7 00		114 00		121 00
Kittridge, R. E. L.	10 50				10 50
Knox, R. G.	94 00				94 50
Lacey, Alex.	13 50		121 00		134 00
Lailey, Whitney, W.	45 00				45 50
Laing, Miss J. C.			5 00		5 00
Lancaster, H. M.	5 50				5 00
Lane, W. B.	5 75				5 75
Lang, W. R.	5 00				5 00
Langford, A. L.	10 75		58 50		69 25
Leaf, W.			2 50		2 50
LeDrew, H. H.	25 75				25 75
Leitch, A.	18 25				18 25
LeMesurier, A. B.	90 00				90 00
Lobb, Miss A. M.	12 50				12 50
Loudon, T. R.	6 75				6 75
Loudon, W. J.	8 75				8 75
Lowry, W. H.	45 00				45 00

12. *Examinations.*—Continued.

Name	Remuneration as Examiner	Expenses	Presiding Examiner	Attendants	Total
Lund, T. H.	13 00				13 00
Mabee, O. R.	50 00				50 00
MacGillivray, Donald	10 50	5 50			16 00
MacGillivray, Edith				15 00	15 00
Mackenzie, A. J.	45 00				54 00
Mackenzie, J. J.	38 50				38 50
Mackenzie, M. A.	19 25				19 25
Maclennan, D. N.	5 00				5 00
MacNamara, J. W.		2 25	2 00		4 25
Madill, H. H.			42 50		42 50
Mann, A. J.		2 00	2 00		4 00
Manning, H. E.	27 00				27 00
Marlow, F. W.	45 00				45 00
Marsh, J. M.				5 00	5 00
Marshall, C. E.	6 00				6 00
Martin, Thomas	22 90	8 80			31 70
McArthur, Jno. W.			35 50		35 50
McCoy, J.		2 25	2 00		4 25
McGilvray, C. D.	25 00				25 00
McGowan, J.	8 75				8 75
McIlwraith, K. C.	55 00				55 00
McIntosh, R. A.	15 00				15 00
McKay, A.			33 00		33 00
McKellar, H. S.	51 50		190 50		242 00
McKeown, P. W. H.	45 00				45 00
McLaughlin, J. F.	10 75				10 75
McMullen, G. A.				54 00	54 00
McMurrich, J. P.	20 50				20 50
McPhedran, A. G.	45 00				45 00
McPhedran, J. H.	45 00				45 00
McPhedran, W. F.	45 00				45 00
McQueen, D. G.		2 00	2 00		4 00
Meader, F. D.	11 25				11 25
Melson, J. W.			32 50		32 50
Mendizabel, A. R.			57 50		57 00
Michael, J. H.	10 75				10 75
Mickle, G. R.	10 00				10 00
Miller, W. Lash	5 75				5 75
Miller, W. N.			10 00		10 00
Moffatt, R. C.	26 25				26 25
Moorehead, A. S.	55 00				55 00
Moote, S. A.				61 50	61 50
Moraud, M.	7 00				7 00
Morley, Miss S. G.	10 75				10 75
Mouré, F. A.	20 75				20 75
Murphy, V. J.	38 00				38 00
Murray, L.	45 00				45 00
Murray, R. W.			8 00		8 00
Murray, W. H.	8 50				8 50
Needler, G. H.	12 00				12 00
Oille, J. A.	101 50				101 50
Orr, W. H.			27 50		27 50
Palmer, E. F.	8 50				8 50
Parkin, J. H.	16 75				16 75
Parks, W. A.	28 88				28 88
Parsons, A. L.	26 75				26 75
Patterson, Miss. A. W.		2 98			2 98
Patterson, G. C.	32 00		42 00		74 00
Pearce, J. A.			15 00		15 00
Pequegnat, A.			45 00		45 00

12. *Examinations.*—Continued.

Name	Remuneration as Examiner	Expenses	Presiding Examiner	Attendants	Total.
Pike, J. G.				13 50	13 50
Phillips, G. H.		2 25	2 00		4 25
Piersol, W. H.	7 25				7 25
Parker, C. B.	45 00				45 00
Perfect, A. H.	45 00				45 00
Pounder, I. R.	48 76		54 00		102 76
Powell, N. A.	6 75				6 75
Powell, F. G.	19 00				19 00
Pratt, E. J.	2 63		180 50		183 13
Pratt, Mrs. V. L.			30 00		30 00
Price, H. W.	20 00				20 00
Primrose, A.	82 00				82 00
Pringle, J. N.	15 25				15 25
Rankin, W. H.	8 50				8 50
Reid, Miss M. G.			49 50		49 50
Richardson, W. L. C.			54 00		54 00
Robertson, D. E.	45 00				45 00
Robertson, L. B.	45 00				45 00
Robins, J. D.	22 00				22 00
Robinson, T. A.	45 00				45 00
Robinson, T. R.	5 75				5 75
Robinson, W. L.	105 00				105 00
Rosebrugh, T. R.	11 00				11 00
Ross, R. A.	20 00				20 00
Royal College of Dental Surgeons	3,220 57	561 87	110 25	176 63	4,069 32
Royce, G.	50 00				50 00
Rudolph, R. D.	102 50				102 50
Satterly, J.	7 00				7 00
Scarrow, A. N.			40 50		40 50
Scott, P. L.	64 25	8 00			72 25
Scott, W. A.	100 00				100 00
Shaw, J. E.	6 00				6 00
Sheard, C.	45 00				45 00
Shenstone, N. S.	45 00				45 00
Sheppard, N. E.			36 00		36 00
Shuttleworth, C. B.	65 00				65 00
Sibbett, W. A.			2 50		2 50
Sifton, H. B.	24 75				24 75
Silverthorn, G.	90 25				90 25
Sinclair, Mrs. Muriel			25 00		25 00
Smart, G. W.				49 50	49 50
Smith, E. G.				25 00	25 00
Smith, G. M.	29 50				29 50
Smith, W. G.			138 00		138 00
Sproule, W. H.	28 00				28 00
Squirrel, W. J.	23 50				23 50
Starr, C. L.	45 00				45 00
Starr, F. N. G.	45 50				45 50
Stevenson, O. J.	52 00				52 00
Stewart, L. B.	5 00				5 00
Strathy, G. S.	47 50				47 50
Stone, R. E.	8 50				8 50
Strong, H. J.				16 25	16 25
Tait, M. D. C.			54 00		54 00
Tattersal, R.	31 00	15 00			46 00
Taylor, N. B.	31 50				31 50
Taylor, W. R.	29 50				29 50
Thomson, E.	11 00				11 00
Tier, Wm.		4 41	4 00		8 41
Tomlinson, A. H.	17 00				17 00

12. *Examinations.*—Continued

Name	Remuneration as Examiner	Expenses	Presiding Examiner	Attendants	Total
Toole, W.	72 75				72 75
Toronto Conservatory of Music		220 00			220 00
Traill, J. J.	5 50				5 50
Treadgold, W. M.	11 00				11 00
Unwin, G. H.	35 75				35 75
Vogt, A. S.	23 00	14 75			37 75
Waddington, Miss M. M.	2 50		87 00		89 50
Wallace, W. S.	15 75				15 75
Wallace, N. W.	5 00				5 00
Walker, T. L.	23 63				23 63
Walton, Ralph				17 50	17 50
Wardell, A.			45 00		45 00
Wass, S. W.				51 00	51 00
Watson, B. P.	7 75				7 75
Watson, W. V.	45 00				45 00
Watt, J. C.	6 75		72 50		79 25
Wesley, R. W.	45 00				45 00
White, J. W.			10 00		10 00
Willan, Healey	47 00				47 00
Williams, R. A.				9 00	9 00
Williams, R. Hodder	5 00		45 00		50 00
Wilson, G. E.	110 00				110 00
Windle, Sir Bertram	5 50				5 50
Wishart, D. J. G.	90 00				90 00
Woodcock, J. N.	13 50		91 00		104 50
Woodhead, W. D.			90 00		90 00
Woodhouse, A. S. P.			24 00		24 00
Workman, G. R.			12 50		12 50
Wrong, G. M.	8 50				8 50
Wrong, Miss M.	6 50				6 50
Wyllie, W. J.				67 50	67 50
Young, C. R.	18 50				18 50
Young, G. S.	55 00				55 00
Yule, G.		2 00	2 00		4 00
Zavitz, C. A.	18 25				18 25
Zeigler, G. H.	35 90				35 90
Zimmer, A. R.			52 50		52 50
Totals	$10,676 42	$945 06	$3,839 75	$995 88	$16,457 11

12. *Examinations.*—Continued.

Apportionment.

	Remuneration as Examiner	Expenses	Presiding Examiner	Attendants	Total
	$ c.	$ c.	$ c.	$ c.	$ c.
Arts	886 04	5 50	924 50	456 50	2,272 54
Medicine	4,114 75	.....	295 50	157 00	4,567 25
Engineering and Applied Science	395 00	.....	820 00	46 25	1,261 25
Education	11 00	.....	138 00	41 25	190 25
Forestry	.....	.....	27 50	.....	27 50
Law	120 50	.....	28 00	.....	148 50
Dentistry	3,220 57	561 87	110 25	176 63	4,069 32
Music	585 05	364 69	65 00	.....	1,014 74
Pharmacy	297 50	8 00	99 00	49 50	454 00
Agriculture	859 26	.....	61 50	.....	920 76
Veterinary Science	173 75	.....	27 00	.....	200 75
Social Service	.....	.....	75 00	.....	75 00
Junior Matriculation	13 00	5 00	1,168 50	68 75	1,255 25
	$10,676 42	$945 06	$3,839 75	$995 88	$16,457 11

Remuneration to Examiners (as detailed above)		$10,676 42	
Presiding and Attendance (as detailed above)		4,835 63	
Examination supplies and sundries, including incidental expenses of Examiners ($3,680.73):			
Examiners' Expenses (detailed above)		945 06	
Department of Education, mathematical tables		18 75	
Office Specialty Co., cards		107 10	
University Press, Examination books, etc.		2,123 85	
Filling in diplomas; E. Awde, $93.60; R. M. Williams, $109.10		202 70	
Rent of Rooms and Pianos at various centres;			
Alberta College North	$12 50		
E. O. Awde	1 50		
W. H. Ballard	3 00		
L. A. Green	1 00		
Mrs. J. E. Hollingshead	10 00		
A. J. Mann	1 00		
F. S. McCall	12 50		
Messrs. Nordheimer Piano and Music Co.	35 00		
Geo. Yule	1 00		
		77 50	
Cartage, etc:—			
Superintendent's Department, labour		97 40	
Long Distance Telephone		65	
Supplies for Pharmacy Examinations:			
C. F. Heebner		107 72	
Printing Examination Papers and Class Lists ($4,143.45):			
University Press		4,143 45	
			$23,336 28

13. *Convocation Expenses.*

The Bursar, postage supplied	$20 00
Geo. Coles, Ltd., catering	1,330 00
Harcourt & Son, Ltd., hoods and gowns	455 00

13. *Convocation Expenses.*—Continued.

Gordon McKay & Co., bunting, etc.	$14 01	
Players' Club, special performance of "Love's Labour Lost"	200 00	
Royal Grenadiers' Band, services	81 00	
University Press, invitations, etc.	214 20	
Superintendent's Dept., labour, $87.47; material, $5.46	92 93	
		$2,407 14

14. *Receptions to Societies and University Visitors.*

Expenses re sundry public lectures:		
By Abbe Ernest Dimnet ($100.00):		
Honorarium	$100 00	
By Dr. I. Langmuir ($282.20):		
Honorarium	282 20	
By Dr. L. Silberstein ($942.50):		
Honorarium	874 80	
Secretary Treasurer, Hart House, accommodation	67 70	
By Dr. E. T. Wherry ($100.02):		
Honorarium	45 32	
Travelling expenses	45 70	
Secretary-Treasurer, Hart House, room rent	9 00	
By Sir Bertram Windle ($598.70):		
Honorarium	500 00	
Expenses	20 00	
Photography, Dept. of, slides	67 20	
Lantern operator, H. R. Jarvis	5 50	
Attendant, J. Wicksey	6 00	
Secretary-Treasurer, Hart House:		
Guest rooms service, $4.00; luncheon, Press Delegates, $184.64; luncheon, Dr. Weizmann, $12.35; sundry guest luncheons, $8.20; dinner for United Farmers of Ontario, $31.90	241 09	
Geo. Coles, catering at Ontario Education Association reception	105 00	
King Edward Hotel, accommodation for sundry guests	60 15	
A. T. Laing, towards reception at reunion of Applied Science graduates	50 00	
Townsend's Livery Ltd., taxi service	2 50	
Craig Hamilton, orchestra at dinner for students of Special Winter Course	25 00	
Musgrave Bros., music at ditto	4 50	
		$2,511 66

15. *Telephones.*

Bell Telephone Co., telephone service to 30 June, 1921		$3,620 34	
G. Lynne, half cost of phone at house (Anatomical Dept.)		16 50	
		3,636 84	
Less receipts from sub-services	$518 07		
And from slot machines	49 01		
		567 08	
		3,069 76	
Switchboard operators ($1,353.93):			
Miss F. Forfar, 52 weeks, 1 day, @ $18.00 per week		939 00	
Mrs. J. Lawrence, 48 weeks, 1 day, @ $7.00 per week, $337.17; 2 days @ $1.00, $2.00		339 17	
Miss E. Fox, 3 weeks, 5 days, @ $7.00 per week, $26.00; 42 hours @ 45¢, $18.90		44 90	
Miss M. Mallory, 10 days @ $18.00 per week		30 86	
			$4,423 69

16. *Insurance.*

Balance of premiums on general schedule brought forward from 1919-20 and charged to Revenue 1920-21	$8,643 93	
Premiums on Hart House:		
Hartford Fire Insurance Co.	$255 23	

16. *Insurance.*—Continued.

Liverpool, London & Globe Insurance Co.	$253 85		
North British & Mercantile Insurance Co. ...	190 00		
Westchester Fire Insurance Co.	248 35		
Massey Foundation, unearned premiums on policies taken over	397 91		
	$1,345 34		
Less charged to 1919-20	522 01		
		823 33	
Casual premiums:			
2 Surrey Place:			
Western Assurance Co.		40 53	
92 St. George Street:			
Waterloo Mutual Fire Insurance Co.		25 00	
Royal Insurance Co.		31 50	
Dominion of Canada Guarantee & Accident Insurance Co., automobile insurance: Geology, $46.85; Mineralogy, $52.75; Grounds truck, $70.55		170 15	
Gull Lake Buildings:			
Home Insurance Co.		187 50	
Aetna Insurance Co. of Hartford		187 50	
North British & Mercantile Insurance Co.:			
Grandstands, fences, etc., $533.75; old Gymnasium Building, $133.32; Electrical Engineering Building contents, $77.50		744 57	
Hydro-Electric Power Commission, electrical inspection..		50 00	
		10,904 01	
Less refunds:			
Alliance Assurance Co.	11 32		
Western Assurance Co.	32 76		
		44 08	
			$10,859 93

17. *Advertising Expenses.*

General Advertising ($914.32):	
Acadia Athenæum	$7 00
Acta Victoriana	20 00
Canadian Engineer	48 64
Canadian Forestry Association	25 00
Canadian Forum	24 00
Canadian Historical Review	20 00
Canadian Medical Association	45 00
Canadian Mining Journal	45 00
College Times	10 00
Copp, Clark Co.	15 00
Extension Print	15 00
Farmer's Sun	50 40
Federation of University Women in Canada	20 00
Heaton Agency	25 00
Ontario Agricultural College Review	15 00
Patches	4 00
Saturday Night	7 00
The School	75 00
Society of American Foresters	7 74
St. Andrew's College Review	20 00
Torontonensis	60 00
Trinity University Review	40 00
University Monthly	155 54
University Y.M.C.A.	22 00
The Varsity	75 00
Westman Press Ltd.	28 00
Wycliffe Magazine	15 00
The Year Book	20 00

17. *Advertising Expenses.*—Continued.

Sundry announcements ($634.94):		
British Periodicals Ltd.	$2 37	
Evening Telegram	142 57	
Globe Printing Co.	137 40	
Mail and Empire	120 00	
The Scotsman	2 37	
The Times	2 96	
Toronto Star	158 17	
Toronto World	69 10	
	1,549 26	
Less credit from Saturday Afternoon Lectures Committee	57 15	
		$1,492 11

18. *Aid to Publications and Societies.*

American School of Oriental Research, Jerusalem	$100 00	
Astronomical Journal	100 00	
British School of Archæology, Jerusalem	88 72	
The School	500 00	
Universities' Bureau, London, England	250 00	
University Engineering Society	150 00	
		$1,188 72

19. *University Studies.*

H. H. Langton, remuneration as General Editor, 12 months to 30 June	$200 00	
Printing, binding and other expenses ($1,453.70):		
Taylor & Francis, printing	34 35	
University Press, printing and binding	1,419 35	
Reprints ($366.43):		
American Electrochemical Society	22 60	
H. K. Lewis & Co.	18 97	
Mortimer & Co.	145 26	
Neill & Co.	17 19	
Williams & Wilkins	45 92	
Wistar Institute of Anatomy and Biology	20 88	
Subscriptions ($16.42):		
American Chemical Society	4 08	
The Lancet	7 34	
University of Toronto Monthly	5 00	
Publication of *Canadian Historical Review* ($3,779.76):		
W. J. Dunlop, remuneration as business manager, 12 months to 30 June	400 00	
W. S. Wallace, editorial fee	400 00	
W. J. Dunlop, disbursements: stenographer's salary, 51 weeks, 3 days, at $7.00 per week, $360.00; payments to contributors, $293.50; postage, $71.16; advertising commission, $44.50; engraving, $24.54; multigraphing, $13.77; sundries, $14.39	821 86	
University Press, printing	2,157 90	
Royalties ($49.37):		
Sundry persons, royalties	49 37	
	$5,865 68	
Less charged to Trust Funds Account	2,865 68	
		$3,000 00

20. *Law Costs.*

John A. Paterson, K.C. taxed costs as solicitor to the University	$89 12	
Less sundry credits	6 00	
		$83 12

21. *Travelling Expenses.*

Travelling expenses of the President and Academic Staff ($1,824.65):		
W. J. Alexander	$350 00	
R. W. Angus	56 50	
J. W. Bain	11 30	
E. W. Banting	26 00	
A. Berrington	33 16	
E. A. Bott	60 00	
I. H. Cameron	25 00	
Sir Robert A. Falconer	100 76	
J. H. Faull	30 00	
C. Fields	60 00	
L Gilchrist	25 00	
P. Gillespie	49 30	
E. Goggio	250 00	
Duncan Graham and J. J. R. Macleod	185 83	
V. E. Henderson	30 00	
Miss E. M. Hickmans	30 00	
A. T. Laing	8 00	
W. R. Lang	25 00	
A. D. LePan	36 50	
C. H. Mitchell	154 80	
J. C. McLennan	52 50	
Miss A. C. McGregor	75 00	
W. A. Parks	30 00	
A. L. Parsons	25 00	
J. Satterly	25 00	
Ellis Thomson	25 00	
T. L. Walker	25 00	
C. H. C. Wright	30 00	
Travelling expenses of the Members of the Senate ($246.55):		
E. N. Baker	15 70	
W. N. Bell	51 80	
E. L. Cameron	22 80	
Jas. H. Coyne	16 65	
Wm. Dale	44 00	
A. P. Gundy	21 50	
Wm. M. Ponton	74 10	
		$2,071 26

22. *Senate Elections.*

Preparing register of graduates ($299.50):		
Miss A. Lobb, 2 months at $75.00 per month	$150 00	
Miss M. J. Helson, 1 month at $75.00	75 00	
Miss A. Chalufour, 4 weeks at $18.00 per week	72 00	
Miss F. J. Hargreaves, 1 day	2 50	
Scrutineers ($50.00):		
Prof. S. Beatty	25 00	
H. H. Langton	25 00	
Printing, postage, etc. ($2,918.65):		
The Bursar, postage supplied	280 00	
Sundry newspapers, announcements	54 90	
University Press, printing	2,583 75	
		$3,268 15

23. *Roll of Service.*

Prof. G. Oswald Smith, remuneration as editor, 12 months to 30 June	$500 00	
Clerical assistance ($686.80):		
Miss A. MacGillivray, 6 months to December 31	650 00	
Miss J. Mearns, 40 hours @ 50¢ per hour, $20.00; 28 hours @ 60¢ per hour, $16.80	36 80	
Office supplies, postage, printing and incidentals ($251.80):		
The Bursar, postage supplied	58 00	
J. E. H. MacDonald, drawings	20 00	

23. *Roll of Service.*—Continued

Miss C. Tocque, typing	$6 00	
Robert N. Williams, lettering	3 60	
University Press, printing and stationery	164 20	
Book and distribution ($5,900.00):		
University Press	5,900 00	
		$7,338 60

24. *Alumni Association.*

W. N. MacQueen, remuneration as organizing secretary, 12 months to 30 June	$2,000 00	
Office and travelling expenses:		
Treasurer, Alumni Association, grant as voted	2,000 00	
Deficit on University Monthly:		
Treasurer, Alumni Association, towards deficit as voted	1,300 00	
		$5,300 00
		$276,092 08

II. Faculty of Arts.

25. *Salaries.*

(1) Departments in University of Toronto ($346,478.75.)

Mathematics.

Professors, each 12 months to 30 June:		
A. T. DeLury	$5,700 00	
M. A. Mackenzie	5,400 00	
J. C. Fields	5,400 00	
S. Beatty, Associate Professor, 12 months to 30 June	3,750 00	
Assistant Professors, each 12 months to 30 June:		
I. R. Pounder	3,125 00	
J. L. Synge	2,700 00	
Fellow (Sessional):		
A. B. Stevenson	700 00	
Miss M. E. G. Waddell, ($700.00 extra services, $50.00)	750 00	
W. S. Ferguson, Lecturer in Accounting (Sessional—paid also $400.00 in Political Science.)	600 00	
		$28,125 00

Mechanics.

W. J. Loudon, Professor, 12 months to 30 June	5,700 00	
N. E. Sheppard, Lecturer (Sessional), Mechanics and Mathematics	1,800 00	
		$7,500 00

Physics.

J. C. McLennan, Professor, 12 months to 30 June	6,000 00	
E. F. Burton, Associate Professor, 12 months to 30 June	4,320 00	
Assistant Professors, each 12 months to 30 June:		
L. Gilchrist	3,560 00	
J. Satterly, including Assistant Directorship of Undergraduate Laboratory	4,200 00	
H. A. McTaggart	3,125 00	
Demonstrators (Sessional):		
Miss F. Quinlan (paid also $150 in Special Research)	1,300 00	
Miss K. Crossley	1,200 00	
Miss I. Giles	1,200 00	

25. *Salaries.*—Continued.

Miss M. I. Mackey	$1,200 00	
Miss H. C. Millar	1,200 00	
V. P. Lubovich, 10 December to 31 May (paid also $125 in Special Research)	713 70	
Assistant Demonstrators (Sessional):		
P. Lowe (paid $125 in Special Research)	700 00	
E. D. MacInnes	700 00	
W. L. McQuarrie	700 00	
Class Assistants (Sessional):		
Miss H. I. Eadie	250 00	
F. W. Kemp (paid also $181.67 in Special Research)	250 00	
Miss A. T. Reed, Class Assistant and Secretary, 12 months' salary	1,500 00	
Miss M. Swonnell, Clerical Assistant, 9½ months to 30 June. @ $75 per month	712 50	
Mechanicians, each 12 months to 30 June:		
T. S. Plaskett	2,400 00	
J. R. Dowdell, Assistant	1,600 00	
E. Slade, Assistant	1,600 00	
R. H. Chappell, Glass-blower, 10 August to 30 June @ $200 a month	2,141 95	
P. Blackman, Lecture and Laboratory Assistant, 12 months' salary	1,400 00	
		$41,973 15

Astronomy.

C. A. Chant, Professor, 12 months to 30 June	4,920 00	
Assistants (Sessional):		
J. A. Pearce	600 00	
F. L. Blake	150 00	
J. B. Russell	75 00	
W. S. Vaughan	75 00	
		$5,820 00

Geology.

Professors, each 12 months to 30 June:		
A. P. Coleman, also Dean of Faculty	6,000 00	
W. A. Parks, Palæontology	5,220 00	
A. MacLean, Assistant Professor, 12 months to 30 June	3,125 00	
Laboratory Attendants @ $75 a month:		
W. Lilly, 4 days	10 00	
D. Driscoll, 7½ months 12 days to 31 May	592 50	
		$14,947 50

Mineralogy.

T. L. Walker, Professor, 12 months to 30 June	6,000 00	
A. L. Parsons, Associate Professor, 12 months to 30 June	3,840 00	
Ellis Thomson, Lecturer (Sessional)	2,500 00	
W. Allingham, Attendant, 8 months' salary	680 00	
		$13,020 00

Chemistry.

Professors, each 12 months to 30 June:		
W. Lash Miller, Physical Chemistry	5,700 00	
F. B. Kenrick	4,800 00	
F. B. Allan, Organic Chemistry	4,800 00	
Assistant Professors, each 12 months to 30 June:		
L. J. Rogers	3,250 00	
J. T. Burt-Gerrans, Electro-Chemistry	3,125 00	

25. *Salaries.*—Continued

Lecturers (Sessional):		
W. S. Funnell	$2,625 00	
W. H. Martin	2,500 00	
Assistants (Sessional):		
J. E. Clark	1,800 00	
M. E. Smith	1,000 00	
N. A. Clark	850 00	
T. C. McMullen	850 00	
C. S. Gilbert	750 00	
E. Haas	750 00	
W. Leaf	750 00	
G. H. W. Lucas	750 00	
J. W. Rebbeck	750 00	
Miss I. L. Roberts	750 00	
G. Williams	750 00	
E. W. Todd, 1 month (paid also $1,750 in Special Research)	250 00	
E. J. Repath, Laboratory Assistant (with rooms, heat and light valued at $420 as caretaker of Chemical building), 12 months to 30 June, $1,100.00; Lecture Assistant (Sessional) $300 00	1,400 00	
Laboratory Attendants, each 12 months to 30 June:		
W. Banton	600 00	
S. King	450 00	
		$39,250 00

Biology.

B. A. Bensley, Professor, Zoology, 12 months to 30 June	5,400 00	
Associate Professors, each 12 months to 30 June:		
W. H. Piersol, Mammalian Anatomy	4,500 00	
E. M. Walker	3,900 00	
A. G. Huntsman, Marine Biology (without salary)		
Assistant Professors, each 12 months to 30 June:		
W. A. Clemens, Elementary Biology, @ $3,125 of which $2,000 paid from Special Research Fund	1,125 00	
A. F. Coventry, Vertebrate Embryology	3,125 00	
Lecturers (Sessional):		
J. R. Dymond, Systematic Vertebrate Zoology	2,000 00	
E. H. Cragie, Comparative Anatomy	1,875 00	
J. W. MacArthur, Experimental Biology (paid also $250 in Physiology)	1,875 00	
W. H. T. Baillie, Mammalian Anatomy	2,000 00	
H. G. Armstrong, Demonstrator (sessional)	700 00	
Miss N. Ford, Special Assistant for Household Science (Sessional)	600 00	
Class Assistants (Sessional):		
L. Pequegnat (paid also in Anatomy)	200 00	
A. E. McCulloch	180 00	
N. B. Laughton	160 00	
J. M. Macdonald	150 00	
O. C. J. Withrow	150 00	
H. D. Ball	100 00	
N. Found	100 00	
P. J. F. Houston	100 00	
A. G. McPhedran	80 00	
P. D. Spohn (paid also in Anatomy)	50 00	
W. J. K. Harkness	25 00	
W. V. Johnston	20 00	
L. M. Murray	20 00	
H. W. Price	20 00	
N. K. Bigelow, Assistant in Systematic Biology (10 months—half time)	625 00	
Preparator Service @ 65c. to 75c. per hour:		
J. E. Bates, 609 hours	456 75	

25. *Salaries.*—Continued.

R. C. Riley, 443 hours	$310 10	
Miss M. Maitland, 50 hours	32 50	
A. Pride, Sub-Curator, Biological Museum, 12 months to 30 June	1,050 00	
E. B. S. Logier, Museum Assistant and Cataloguer (10 months—half time)	625 00	
Miss E. Mason, Office Assistant, 12 months to 30 June	1,000 00	
Laboratory Attendants:		
J. T. Howells, 12 months to 30 June	1,200 00	
S. G. Smith, Junior, 7½ months, 13 days to 4 June @ $56 per month	443 38	
Miss N. C. Lawler, Departmental Secretary, 12 months salary	1,000 00	
		$35,197 73

Botany.

J. H. Faull, Professor, 12 months to 30 June	4,920 00	
R. B. Thomson, Associate Professor, 12 months to 30 June	4,320 00	
Lecturers (Sessional):		
G. H. Duff	2,125 00	
Miss J. G. Wright	1,500 00	
Assistants (Sessional):		
A. R. Walker (paid also $400 in Special Research)	1,400 00	
E. H. Moss	1,200 00	
H. D. Brown	200 00	
F. B. Adamstone	150 00	
Miss L. M. Hunter	100 00	
Miss J. McGugan, Fellow (Sessional)	500 00	
Technical Assistants, each 12 months salary:		
Miss M. E. Currie	1,000 00	
Miss M. V. McCulloch	1,000 00	
A. Simpson, Gardener (with living quarters valued at $360), 12 months to 30 June	1,600 00	
Laboratory Attendants @ $9 00 a week		
F. Christie, 41 weeks, 5 days	376 50	
J. Tiboldo, 6 weeks, 3 days	60 00	
Occasional service, sundry persons	34 20	
		$20,485 70

Bio-Chemistry.

Andrew Hunter, Professor, 12 months to 30 June	6,000 00	
Associate Professors, 12 months to 30 June:		
H. B. Speakman, Zymology (without salary—paid in Special Research)		
H. Wasteneys (paid also $100.00 in Medical Faculty)	3,875 00	
Miss J. McFarlane, Demonstrator (Sessional)	1,200 00	
Fellows (Sessional):		
N. S. Clark (paid also $85 in Special Research)	900 00	
R. W. I. Urquhart (paid also $85 in Special Research)	900 00	
H. Borsook	600 00	
A. M. Wynne (paid also $1,200 in Special Research)	600 00	
J. W. Fletcher, Technician, 12 months to 30 June	1,200 00	
Miss E. Dempsey, Technical Assistant, 9½ months to 30 June @ $900 00 per annum	712 50	
A. E. Giddens, Laboratory Assistant, 12 months to 30 June	1,000 00	
Miss M. Delamere, Secretary Assistant, 12 months salary	1,000 00	
S. Lloyd, Cleaner, 9½ months to 30 June @ $75 per month of which half charged to Pharmacology	356 25	
		$18,343 75

25. *Salaries.*—Continued.

Physiology.

J. J. R. Macleod, Professor, 12 months to 30 June (paid also $1,500.00 as Associate Dean, Faculty of Medicine) ..	$6,000 00	
Assistant Professors:		
A. C. Redfield, 1 month @ $2,700 00 per annum (resigned)	225 00	
J. M. D. Olmstead, 11 months to 30 June @ $3,000 00 per annum	2,750 00	
N. B. Taylor, Lecturer, also for Veterinary students (Sessional paid also $500 00 in Special Research)	3,250 00	
J. W. MacArthur, Demonstrator (Sessional—paid also in Biology)	250 00	
Fellows (Sessional)		
Miss J. Lang	800 00	
S. U. Page	800 00	
C. H. Best (part time—paid also $285 in Special Research)	400 00	
E. C. Noble (part time—paid also $285 in Special Research)	400 00	
Miss C. J. Fraser (part time)	300 00	
C. F. Knight (Michaelmas Term)	150 00	
Departmental Librarians:		
Mrs. M. E. McFarlane, 4 mos. to 31 October (resigned) @ $1,000 per annum	333 33	
Miss M. Grange, 8 mos. to 30 June @ $70 per month	560 00	
Miss M. E. Armour, Assistant and Secretary, 10 mos. @ $ 1,000 per annum; 2 mos. (part time) @ $50 per month	933 33	
E. Brock, Mechanic, 12 mos. salary	1,440 00	
F. L. Robinson, Laboratory Assistant and Glassblower, 12 mos. to 30 June	1,600 00	
Laboratory Assistant for Teaching Laboratories @ $75 per month		
S. R. Smith, 3 mos., $225, less deducted $9.24	215 76	
J. Creasy, 6 mos. to 30 June	450 00	
W. Joyce, Animal Attendant, 12 mos. salary	1,050 00	
Mrs. R. Green, Laboratory Cleaner (part time)	394 50	
		22,301 92

History and Ethnology.

G. M. Wrong, Professor, 12 mos. to 30 June	6,000 00	
Associate Professors, each 12 mos. to 30 June:		
R. Hodder Williams	3,875 00	
G. M. Smith	3,875 00	
R. Flensey	3,875 00	
W. P. M. Kennedy, Assistant Professor, 12 mos. to 30 June	3,440 00	
Special Lecturers (Sessional):		
W. S. Wallace (paid also as Assistant Librarian)	1,000 00	
S. H. Hooke	940 00	
Instructors (Sessional):		
Miss M. C. Wrong (paid also in U. C. Women's Union)	940 00	
E. H. Blake, 5 mos. @ $120 per month	600 00	
		24,545 00

Comparative Philology

A. J. Bell, Professor, 12 mos. to 30 June (part time)	900 00	
		900 00

Italian and Spanish.

Professors, each 12 mos. to 30 June:		
M. A. Buchanan	4,920 00	
J. E. Shaw	4,800 00	
E. Goggio, Assistant Professor, 12 mos. to 30 June	2,700 00	
G. C. Patterson, Lecturer (Sessional)	2,250 00	
J. Pijoan, Instructor (Sessional)	1,500 00	
		16,170 00

25. *Salaries.*—Continued.

Philosophy

Professors, each 12 mos. to 30 June:		
J. G. Hume, History of Philosophy	$5,700 00	
G. S. Brett (part time)	3,600 00	
T. R. Robinson, Assistant Professor, 12 mos. to 30 June	3,875 00	
		13,175 00

Psychology.

C. K. Clarke, Director (without salary—paid as Professor, Faculty of Medicine)	.....	
W. G. Smith, Associate Professor, 12 mos. to 30 June (resigned)	3,900 00	
E. A. Bott, Assistant Professor, 12 mos. to 30 June	3,000 00	
W. A. Cook, Lecturer (Sessional)	1,500 00	
Miss J. Masten, Laboratory Assistant (Sessional—part time)	300 00	
Assistants (temporary):		
Miss E. Burton, 4 mos. @ $50 per month	200 00	
Miss C. H. Keens, 1 month, 9 days @ $65 per month	84 00	
G. C. Cooper, Technician, 12 months' salary	1,900 00	
		10,884 00

Political Science

James Mavor, Professor, 12 mos. to 30 June	6,000 00	
R. M. MacIver, Associated Professor, 12 mos. to 30 June	4,200 00	
Assistant Professors, each 12 mos. to 30 June:		
W. T. Jackman, Political Economy	3,440 00	
G. E. Jackson, Economics	3,125 00	
Lecturers, (Sessional) :		
H. A. Innis, Political Economy	2,000 00	
H. Marshall, Economics	1,875 00	
H. R. Kemp, Economics	1,800 00	
T. H. Black, Professor of Roman Law, 12 mos. to 30 June	3,000 00	
Lecturers (Sessional) :		
A. R. Clute, Constitutional Law (paid also $400 in Applied Science)	750 00	
H. W. A. Foster, Commercial and International Law	750 00	
W. S. Ferguson, Accountancy, (paid also in Mathematics)	400 00	
		27,340 00

History of Industrial Art.

C. T. Currelly, Professor, 12 months to 30 June (part time)	4,500 00	
Miss C. Harcum, Assistant in Archæology, 12 months' salary	2,000 00	
		$6,500 00

(2) Departments in University College ($133,423 00).

Greek.

Professors, each 12 months to 30 June:		
M. Hutton (paid also $1,250 as Principal of University College)	6,000 00	
A. Carruthers, Greek Literature and Archæology	4,920 00	
W. D. Woodhead, Assistant Professor, 12 months to 30 June	3,125 00	
		$14,045 00

Latin.

J. MacNaughton, Professor, 12 months to 30 June	6,000 00	
G. Oswald Smith, Associate Professor, 12 months to 30 June (paid also $500 as Editor of Roll of Strvice)	3,720 00	
Assistant Professors, each 12 months to 30 June:		
E. A. Dale	3,440 00	
David Duff	2,940 00	
J. B. West, Instructor (Sessional)	1,200 00	
		$17,300 00

25. *Ancient History.*—Continued.

Ancient History.

W. S. Milner, Professor, 12 months to 30 June	$5,700 00	
Assistant Professors, each 12 months to 30 June :		
A. Grant Brown	3,125 00	
C. N. Cochrane	3,125 00	
		$11,950 00

English.

Professors, each 12 months to 30 June :		
W. J. Alexander	6,000 00	
D. R. Keys, Anglo-Saxon	4,920 00	
M. W. Wallace	4,920 00	
R. S. Knox, Associate Professor, 12 months to 30 June	3,100 00	
W. S. Clawson, Assistant Professor, 12 months to 30 June	3,250 00	
Miss M. M. Waddington, Lecturer (Sessional)	2,000 00	
Assistants (Sessional) :		
Miss G. I. Wookey	1,200 00	
A. S. Woodhouse	1,000 00	
H. K. Gordon (temporary)	78 00	
		$26,468 00

French.

Professors, each 12 months to 30 June :		
J. Home Cameron	5,220 00	
J. S. Will	4,920 00	
St. E. De Champ, Associate Professor, 12 months to 30 June	4,500 00	
Assistant Professors, each 12 months to 30 June :		
F. C. A. Jeanneret (paid also $650 as Registrar of University College)	3,125 00	
M. Moraud	3,125 00	
Lecturers (Sessional) :		
H. S. McKellar	2,500 00	
Miss A. Chalufour	1,800 00	
W. D. Evans	1,800 00	
Instructors (Sessional—part time):		
W. J. McAndrew	1,200 00	
L. A. Bibet	600 00	
		$28,790 00

German.

G. H. Needler, Professor, 12 months to 30 June	5,400 00	
Barker Fairley, Associate Professor, 12 months to 30 June	4,200 00	
Thure Hedman, Assistant Professor, 8 months to 30 June @ $3,000 per annum	2,000 00	
G. E. Holt, Lecturer (Sessional)	2,190 00	
		$13,790 00

Oriental Languages.

Professors, each 12 months to 30 June :		
W. R. Taylor	5,220 00	
J. A. Craig	4,920 00	
W. A. Irwin, Lecturer (Sessional)	1,875 00	
		$12,015 00

Ethics.

F. Tracy, Professor, 12 months to 30 June	5,220 00	
		$5,220 00

25. *Salaries.*—Continued.

University College, General.

M. Hutton, Principal, 12 months to 30 June (paid also in Greek)	$1,250 00	
F. C. A. Jeanneret, Registrar, 12 months to 30 June (paid also in French)	650 00	
Miss C. Tocque, Registrar's Clerk, 12 months to 30 June	1,000 00	
Miss M. F. Dougall, Secretary to Language Departments, 9 months' salary	945 00	
		$3,845 00
		$479,901 75

26. *Main Building.*

Heat and light (supplied from Central Power Plant) :		
Gas, city current and occasional fuel ($61.90):		
Consumers' Gas Co.	61 90	
Water ($67.95) :		
City Treasurer	67 95	
Caretaker's Supplies ($600.00)		
C. W. Mack, stamp	4 50	
Superintendent's Dept., labour, $13.08; material, $582.42	595 50	
Cleaning ($4,511.69) :		
Allen Manufacturing Co., laundry	24 90	
Canadian Cleaning Co., cleaning windows	60 00	
Superintendent's Dept., labour	4,426 79	
Repairs and renewals ($6,182.72 :		
Wm. Bartlett & Son, shades	106 76	
T. Eaton Co., flag	13 00	
Dunlop Tire & Rubber Goods Co., mat	9 56	
McFarlane Mfg. Co., ladder	9 79	
McKay School Equipment Ltd., desks	221 80	
A. Norton, wiring chairs	87 50	
R. Robertson & Sons, painting, cutting doorway, etc.	125 90	
Routery Bros., repairs to plaster	67 05	
University Press, name plates, etc.	5 60	
Petty items (3)	4 79	
Superintendent's Dept., labour, $4,125.06; material, $1,405.91	5,530 97	
	11,424 26	
Less sundry credits	264 00	
	11,160 26	
Janitor, C. E. Bradshaw, 12 months to 30 June	1,500 00	
Messenger Service		
At $8.00 to $15.00 per week:		
R. Cowling, 39 weeks, 4 days	312 00	
Miss Fox, 21 weeks, 3 days	318 14	
S. D. Greer, 9 weeks 3 days	66 50	
T. Lister, 30 weeks, 1 day	469 33	
Miss Mitz, 29 weeks, 4 days	414 00	
R. Oullahan, 7½ days	10 00	
Messengers' car fares, etc.	29 60	
		14,279 83

27. *Biological Building and Department.*

(a) Maintenance of Building:		
Heat and light (supplied from Central Power Plant):		
Gas, city current and occasional fuel ($156.91):		
Consumers' Gas Co.	105 91	
Dunlop Coal Co., fuel	51 00	

27. *Biological Building and Department.*—Continued.

Water ($78.40) :		
City Treasurer	$78 40	
Caretakers' Supplies ($280.50) :		
Superintendent's Dept., labour, $5.82; material, $274.68 ..	280 50	
Cleaning ($992 25):		
Canadian Cleaning Co., cleaning windows	40 00	
Superintendent's Dept., labour	952 25	
Repairs and renewals ($1,613.82):		
Wm. Bartlett & Son, shades	41 32	
City Treasurer, elevator license	5 00	
F. A. Ellis, repairs to clock	1 50	
R. Robertson & Sons, painting	16 75	
Routery Bros., repairs to ceiling	12 85	
University Press, name plates	2 95	
Superintendent's Dept., labour. $1.200 57; material, $332 88	1,533 45	
	3,121 88	
Less sundry credits, cleaning, $17.50; repairs, $1.00	18 50	
	3,103 38	
Caretaker, D. J. Clark. 12 months to 30 June	1,200 00	
		$4,303 38
(b) Maintenance of Department		
Laboratory and Lecture Room supplies ($894.27):		
Art Metropole, paper	9 52	
Brown Bros., mimeograph	212 10	
W. R. Brock Co., cotton	8 82	
Canadian Industrial Alcohol Co.., methylated spirits	89 07	
G. D. Campbell, slides	50 00	
M. E. Carson, specimens	8 34	
Freyseng Cork Co., corks	17 89	
J. F. Hartz Co., chemicals	5 05	
Lyman Bros., chemicals	13 06	
Marine Biological Laboratory, specimens, etc.	29 70	
Miller Men's Wear, laboratory coats	56 10	
Ontario Rubber Co., tubing	7 46	
Photography, Dept. of, slides	16 60	
Powers & Powers, specimens	8 90	
Richards Glass Co., vials	7 91	
Students' Book Dept., books	30 90	
Toronto Dog and Cat Hospital, animals	10 50	
Ward's Natural Science Establishment, specimens	36 11	
Will Corporation, chemicals, etc.	34 34	
University Press, printing and stationery	107 60	
Petty Items (6)	18 02	
Frieght charges, etc.	106 55	
Superintendent's Dept., labour, $3.05; material, $6.68 ..	9 73	
Museum specimens, supplies and catologue (242.51) : h		
Lyman Bros., chemicals	1 68	
Scientific Materials Co., jars	221 83	
Wistar Institution of Anatomy and Biology, subscription	11 30	
Superintendent's Dept., labour, $7.46; material, .24	7 70	
Marine and Lake Laboratories ($68.68):		
W. A. Clemens, expenses to Lake Erie Convention, St. Thomas	13 70	
J. W. MacArthur, re Fur Breeders' Association, hotel and travelling expenses	50 60	
Prof. E. M. Walker, travelling expenses, Leamington, Point Pelee, Windsor, Orient Bay, $123.70; canoe rental,, suppplies, etc., $30.68; $154.38 less charged to 1919-20, $150.00	4.38	
Students' Laboratory supplies ($2,088.17):		
W. R. Brock Co., sateen, cotton, etc.	124 34	

27. *Biological Building and Department.*—Continued.

D. Clarke, earthworms		$7 50
Wm. Croft & Sons, needles and pins		19 77
T. Eaton & Co., glasses		7 20
S. Eagan, hatching eggs		6 50
J. F. Hartz Co., slide boxes, glasses, etc.		437 12
Lyman Bros. & Co., chemicals		119 88
Marine Biological Laboratory, specimens		139 15
National Drug & Chemical Co, chemicals		59 39
J. Stevens & Co., section lifters		56 56
Toronto Dog and Cat Hospital, rabbits and frogs		224 00
Toronto Hydro-Electric System, incubator		25 00
Will Corporation, bottles, etc.		210 32
University Press, printing and stationery		643 50
Petty items (2)		6 13
Superintendent's Dept., material		1 81
Microscopes and apparatus ($2,296.73):		
Art Metropole, microscopes		1,527 77
Buffalo Apparatus Corporation, clamps		10 34
Burroughs Adding Machine Co., adding machine		220 50
J. F. Hartz Co., repairs to oven, knives, etc.		47 09
Ludwig Hommel & Co., apparatus		51 67
J. C. Ramsey & Co., plates		5 03
Spencer Lens Co.		367 45
Will Corporation, thermometers		51 46
Petty items (3)		6 82
Superintendent's Dept., labour, $5.65; material, $2.95		8 60
Furnishings, fittings and new equipment ($2,462.28):		
Adams Furniture Co., stools		96 00
T. Eaton Co., towels, etc.,		49 75
T. Eaton Drug Co., crocks		15 90
Office Specialty Mfg. Co., card cabinet		23 21
United Typewriter Co., typewriters		263 25
Superintendent's Dept., labour, $1,254.31: material, $859.86		2,014 17
Incidentals ($263.23):		
Allen Mfg. Co., laundry		101 30
Art Metropole, map		5 45
Prof. B A. Bensley, disbursements: Laboratory supplies, $38.24; stationery and postage, $14.88; car fares, and sundries, $6.88		60 00
The Bursar, postage supplied		11 50
Marchment Co. Ltd., removing manure		20 50
United Typewriter Co., inspection		6 75
University Press, stationery		17 60
Petty items (6)		16 38
Freight charges, etc.		18 86
Superintendent's Dept., labour, $4.40; material, .49		4 89
Messenger Service ($275.00):		
Wm. Bain, 5 days at $7.50 per week		6 25
L. Norris, 34 weeks, 11 days, at $7.50 per week		268 75
		8,590 87
Less sundry credits:		
Applied Chemistry Dept., spirits	$2 20	
Canadian Express Co., refund	2 50	4 70
		$8,586 17
		$12,889 55

28. *Department of Botany.*

Apparatus and equipment ($1,546 27):		
Bausch & Lomb Optical Co., microscopes, etc.		977 78
Canadian Office Appliance & Supply Co., typing machine		19 50

28. *Department of Botany.*—Continued.

Canadian Pad & Paper Co., paper	$1 44
Grand & Toy, desk	55 00
J. F. Hartz & Co., tubes, etc	18 30
Spencer Lens Co., objectives, etc	85 79
Will Corporation, bottles, dishes, etc	311 69
Freight charges, etc	45 46
Superintendent's Dept., labour, $5.59; material, $25.72	31 31
Laboratory and office supplies ($720.24):	
The Bursar, postage supplied	12 00
G. H. Duff, disbursements, laboratory supplies	32 91
T. Eaton Co., sateen, etc	85 06
J. F. Hartz & Co., bottles and cotton	11 59
Ingram & Bell, chemicals	6 92
Lyman Bros. & Co., chemicals	26 49
New York Biological Laboratory, slides	8 91
Parke, Davis & Co., chemicals	12 43
Plant Study Co., scales	5 51
J. G. Ramsey & Co., photographic supplies	6.11
Telfer Mfg. Co., cases	29 43
Miss I. Underhill, disbursements:	
Postage, $6.59; laboratory supplies and sundries, $13.41	20 00
United Typewriter Co., inspections	7.50
Will Corporation, supplies	53 56
University Press, printing and stationery	297 50
Petty items (3)	8 61
Freight charges, etc	50 00
Superintendent's Dept., labour, $17.15; material, $28.56	45 71
Museum and Herbarium supplies ($494.35):	
A. Casens, specimens	30 00
Kny Scheerer Corporation, mounts	41 74
J. W. Lawson, models	150 00
Office Specialty Mfg. Co., cabinet, etc	28 45
Photography, Dept. of, plates, etc	35 60
Rudd Paper Box Co., boxes	21 21
Ward's Natural Science Establishment, fossils	96 07
T. O. Weigel, book	38
University Press, printing, binding, etc	90 90
Clerical assistance and assistance in Museum and Herbarium ($810.00):	
Miss D. Gardiner, 1 day	5 00
Miss R. B. Kennedy, 1 day	5 00
Miss I. Underhill, 8 months	800 00
Alterations in Laboratory ($3,498.02):	
Wm. Bartlett & Son, shades and rollers	28 33
R. Robertson & Son, cutting windows	135 00
Routery Bros., lathing and plastering	143 00
Superintendent's Dept., labour, $1,826; material, $1,365.37	3,191 69
Botanic Garden and Greenhouse supplies, material and labour in connection ($3,197.81):	
The Bursar, postage supplied	5 00
John Davis & Son, seeds	25 95
A. E. Long & Co., boxes	51 72
Lord & Burnham Co., greenhouse material	393 62
C. H. MacDonald, map	8 00
A. A. Moses, hardware	10 00
New York Botanic Garden, book	11 58
Ontario Lime Co., sand, etc	70 50
Ryder & Son, seeds	11 88
J. A. Simmers, supplies	29 80
Toronto Produce Co., fodder	39 60
University Press, stationery	13 70
Petty items (3)	10 48
Freight charges, etc	108 68

28. *Department of Botany.*—Continued.

Superintendent's Dept., labour, $103.12; material, $144.19	$247 31	
W. Hirons, 50 weeks, 5 days and 1 hour at $24.00 per week	1,220 95	
Miss Jean McGugan, 4 months at $100.00	400 00	
F. Hitchcock, 748 hours at 48c	359 04	
W. J. Marks, 6 weeks at $22.00	132 00	
R. Jones, 2 weeks at $24.00	48 00	
New Botanic Garden Scheme ($959.27) :		
Alfred Buckley, honorarium re editorials	25 00	
The Bursar, posage supplied	20 00	
Miss M. E. Coo, attendance and transcribing	25 30	
Hart House, entertainment of guests at conference	37 00	
James & Son, prints, slides, etc	28 56	
C. H. MacDonald, map	3 00	
Photography, Dept. of, slides, blueprints, etc	10 55	
Prof. R. B. Thomson, petty disbursements, to be accounted for in 1921-22	25 00	
United Typewriter Co., rental	12 50	
J. Wicksey, attendance	2 50	
University Press, stationery	32 10	
Superintendent's Dept., labour	5 25	
Clerical assistance:		
A. P. Matthews, 17 weeks, 3 days, at $25.00 per week	437 51	
Miss M. Winterbottom, 9 weeks at $25.00	225 00	
Miss R. Dinsmore, 3 weeks at $20.00	60 00	
Miss M. E. Railton, 20 hours at 50c	10 00	
	11,225 96	
Less students' laboratory deposits transferred	24 00	
		$11,201 96

29. *Department of Bio-Chemistry.*

Laboratory and office supplies ($1,915.16):	
Canadian Laboratory Supplies, chemicals	60 41
Dominion Rubber System, tubing	42 87
T. Eaton Co., towelling	36 00
Grand & Toy, stationery	8 85
Grasselli Chemical Co., chemicals	142 48
Harris Abattoir Co., meat	56 95
J. F. Hartz Co., chemicals	7 58
R. B. Hayhoe, peanuts	9 09
Hudson Parker Co., coats	42 84
Ingram & Bell, funnels	7 76
Kehoe & Keough, cups	10 08
Lake Simcoe Ice Co., ice	84 25
Lyman Bros., chemicals	14 59
Mallinckrodt Chemical Works, chemicals	25 81
McKay School Equipment, supplies	820 49
Gordon MacKay & Co., cloth	15 38
Ontario Lime Co., lime	9 74
Photography, Dept. of, slides	8 80
J. G. Ramsey & Co., trays, etc	6 72
F. Simpson & Sons, provisions	42 76
Tablet & Ticket Co., letters	23 86
A. H. Thomas, filter paper	32 98
United Typewriter Co., inspection	7 50
University Press, printing and stationery	189 95
Freight charges, etc	65 83
Items under $5.00 (10)	19 97
Superintendent's Dept., labour, $37.30; material, $84.32	121 62

29. *Department of Bio-Chemistry.*—Continued.

Apparatus ($2,150.73):		
Aikenhead Hardware Ltd., hardware	$10 57	
Central Scientific Co., funnels, etc	39.44	
T. Eaton Co., supplies	153 50	
Ingram & Bell, apparatus	226 40	
International Equipment, burners	36 89	
Lowe-Martin Co., filing cabinet	25 50	
McKay School Equipment, test tubes, etc	79 80	
Scientific Materials, dishes, etc	1,362 08	
Petty items (2)	6 31	
Superintendent's Dept., labour, $115.05; material, $95.19	210 24	
Fitting up Laboratory and renovating rooms ($2,844 68):		
Superintendent's Dept., labour, $1,548.91; material, $1,295.77	2,844 68	
		$6,910 57

30. *Physiological Department.*

Laboratory and office supplies ($2,565.39):		
Aikenhead Hardware Co., hardware	124 97	
Anglers Co., frogs and turtles	304 32	
Canadian General Electric Co., wire, etc	27 23	
Canadian Kodak Co., plates, etc	6 29	
Columbia Graphaphone Co., claraphone	7 35	
Connaught Antitoxin Laboratories, Antitoxin Division, rabbits	85 00	
Wm. Davies Co., meat	5 50	
T Eaton Co., sundries	62 15	
J. A. Fontaine, frogs	157 50	
Geo. E. Grove, chairs	6 60	
Harvard Apparatus, glasses	16 01	
G. M. Hendry, hardware	6 50	
H. M. Stationery Office, reports	7 22	
Hooper, Co., chemicals	5 50	
Hudson Parker Ltd., laboratory coats	41 82	
Ingram & Bell, supplies	114 04	
H. K. Lewis & Co., books	11 65	
Lyman Bros., chemicals	132 81	
Jas. Morrison Brass Co., connections	14 80	
McAinsh & Co., books	27 30	
McKay School Equipment, flasks, etc	105 90	
Prof. J. J. R. Macleod, disbursements: Laundry, $44.42; chemicals and laboratory supplies, $39.61; hardware, etc., $17.73; car fare and postage, $14.19; sundries, $9.05	125 00	
O'Keefe Brewery, mineral water	7 56	
Dr. A. Primrose, encylopædia	60 00	
Quarterly Journal of Experimental Research, journal	13 55	
Students' Book Dept., books	7 85	
Tablet & Ticket Co., letters	6 60	
A. H. Thomas Co., burettes	43 79	
Toronto Dog and Cat Hospital, animals	529 05	
Toronto Produce Co., fodder, dog biscuits, etc	180 11	
United Typewriter Co., inspection	6 75	
Williams & Wilkins, reprints	19 72	
Harold A. Wilson Co., dumbells	11 88	
University Press, stationery and printing	138 52	
Petty items (13)	41 95	
Freight charges, etc	38 80	
Superintendent's Dept., labour, $10.96; material, $52.84	63 80	
Apparatus ($1,762.47):		
Aikenhead Hardware Co., hardware	1 70	
Canadian Kodak Co., plates	29 73	
Canadian Laboratory Supplies, generator, etc	185 40	

30. *Physiological Department.*—Continued.

Harvard Apparatus, magnet, etc.		$467 99	
Ingram & Bell, syringes		55 80	
McKay School Equipment Co., microscopes, etc		920 66	
J. G. Ramsey & Co., plates		6 61	
Ryrie Bros., watches		36 00	
Taylor Instrument Co., testing thermometer		27 15	
A. H. Thomas Co., tubes		18 73	
Superintendent's Dept., material		12 70	
Alterations and fitting up Laboratory ($355.12):			
Canada Metal Co., tubing		5 10	
T. Eaton Co., sundries		67 27	
Instruments Ltd., fibre string		17 85	
Sadler & Haworth, belting		35 93	
Superintendent's Dept., labour, $107.21; material, $121.76		228 97	
Keep of animals ($150.00):			
Connaught Antitoxin Laboratories, Antitoxin Division, animals		36 25	
Toronto Dog and Cat Hospital		113 75	
		4,832 98	
Less sundry credits:			
Animals ($119.25:)			
Dominion Health Dept.	107 50		
Connaught Antitoxin Laboratory, Research Division	10 50		
Bio-Chemistry Dept.	1 25		
Apparatus ($40.98):			
Montefiore Home	22 62		
Special Research Medicine	15 00		
Willis Faber & Co., damage	3 36	160 23	
			$4,672 75

31. *Chemical Building and Department.*

(*a*) Maintenance of Building:		
Heat and light (supplied from Central Power Plant):		
Gas, city current and occasional fuel ($390.14):		
Consumers' Gas Co.	390 14	
Water ($249.79):		
City Treasurer	249 79	
Caretaker's supplies ($188.80):		
Superintendent's Dept., labour, $3.55; material, $185.25	188 80	
Cleaning ($1,248.54);		
Allen Mfg. Co., laundry	9 18	
Canadian Cleaning Co., cleaning windows	20 00	
Superintendent's Dept., labour	1,219 36	
Repairs and renewals ($1,457.37):		
A. Matthews Ltd., changing ventilating pipes	168 57	
R. Robertson & Sons, brick work	30 00	
University Press, name plates	95	
Superintendent's Dept., labour, $858.55; material, $399.30	1,257 85	
		$3,534 64
(*b*) Maintenance of Department:		
Chemicals, glassware and apparatus ($3,974.08):		
American Magnesium Corporation, powder	18 46	
Art Metropole, tubing, clamps, funnels, etc.	847 81	
J. T. Baker Chemical Co., chemical supplies	226 15	
Beaver Flint Glass Co., test tubes	73 64	
F. E. Becker & Co., weights	281 17	
Buffalo Apparatus Corporation, flasks, iron supports, etc	366 42	

31. *Chemical Building and Department.*—Continued.

The Bursar, postage supplied		$15 00
Canadian General Electric Co., tubing		4 04
Canadian Laboratory Supplies, burettes, etc.		145 77
Central Scientific Co., pumps, etc.		294 73
Consolilated Optical Co., plate glass		10 40
Dental Co., of Canada, blow pipes		10 35
Eastman Kodak Co., photographic materials, etc.		485 49
T. Eaton Co., towelling		133 67
E. B. Eddy Co., matches		36 32
J. H. Edmunds, sand baths		51 51
Prof. J. B. Ferguson, hot-plates		20 00
Goldsmith Bros., silver nitrate		55 00
D. Goldstick, adjusting weights		26 80
Grasselli Chemical Co., acids		308 31
E. & A. Gunther, glasses		118 68
C. A. F. Kahlbaum, meta-xylol		14 37
L'Air Liquide Society, oxygen, gauze, etc.		20 05
Leeds & Northrup Co., galvanometer lamps		15 23
Lyman Bros. & Co., chemicals		153 46
Mallinckrodt Chemical Works, chemicals		8 08
Geo. A. Matthews, rewinding motor		16 35
McKay School Equipment, wire		31 43
McMaster University, choloride		5 00
T. C. McMullen, making and adjusting weights		18 00
Prof. W. Lash Miller, disbursements: Chemical and laboratory supplies, $111.94; hardware, tubing, etc., $74.76; telegrams and sundries $9.38		196 08
National Electric Products Ltd., hydrogen, etc.		5 79
Ontario Cork Co., corks		54 09
Ontario Rubber Co., stoppers, tubing, etc.		145 04
The Palo Co., pipettes		8 68
T. G. Rice Wire Mfg. Co., wire stands		20 40
Richards Glass Co., stoppers, flasks, tubing, etc.		174 86
Rogers Electric Co., buzzer		5 48
Ryrie Bros., watch		5 00
J. Whitehouse, repairing microscope		15 00
Will Corporation, weights		21 43
W. Younger, chair, etc.		15 00
University Press, printing and supplies		554 15
Freight charges, etc.		69 29
Superintendent's Dept., labour, $110.28; material, $73.82		184 10
		$5.286.08
Less received from Student's Account	1,300.00	
Sundry credits	12.00	1,312 00
		$3,974 08
Fitting up New Laboratories ($4,904.08)		
Wm. Bartlett & Son, shades		19 71
B. M. & T. Jenkins, table		25 00
R. Robertson & Sons, cutting opening		280 00
N. Smith, belting		6.55
Superintendent's Dept., labour, $2,714.07; material $1,858.75		4,572 82
		$ 8,878.16
		$12,412.80

32. *Sub-Department of Physical Chemistry.*

Chemicals, apparatus and maintenance ($459.57):	
J. T. Baker Chemical Co., chemicals	$ 22 66
Canadian Laboratory Supplies, tubing, etc.	38 60

32. *Sub-Department of Physical Chemistry.*—Continued.

Consolidated Optical Co., glass	$6 00	
Chas. Cooper & Co., mercury	69 57	
Cooper Hewitt Electric Co., tubing	33 12	
Edison Swan Electric Co., lamps	10 64	
Adam Hilger. Ltd., plates	11 58	
Pyrolectric Instrument Co., spark gap	133 45	
H. J. Roast, slides	41 00	
Royal Mint, silver proof plate	9 00	
Ryrie Bros., stop watch	13 50	
Petty Items (2)	4 27	
Freight charges, etc.	4 18	
Superintendent's Dept., labour, $49.46; material $12.54	62 00	
		$459 57

33. *Physics Building and Department.*

(a) Maintenance of Building:		
Heat and Light (supplied from Central Power Plant):		
Gas, city current and occasional fuel ($241.93:		
Consumers' Gas Co.	241 93	
Water ($710.21):		
City Treasurer	710 21	
Caretaker's supplies ($184.26):		
Superintendent's Dept., labour, $2,44; material, $181.82	184 26	
Cleaning ($1,341,50):		
Canadian Cleaning Co., cleaning windows	47 90	
Superintendent's Dept., labour	1,293 60	
Repairs and renewals ($2,152.25):		
Wm. Bartlett & Son, shades	11 25	
City Treasurer, elevator license	5 00	
Johnson Temperature Regulating Co., repairs	39 65	
Geo. A. Matthews, repairs to armature	34 20	
J. Wicksey, attendance at meeting	2 50	
Superintendent's Dept., labour, $1,507.85 material, $551.80	2,059 65	
	4,630 15	
Less sundry credits, cleaning, etc.	72.70	
	4,557 45	
Caretaker, J. Wicksey, 12 months to 30 June	1,400 00	
		$5,957 45
(b) Maintenance of Department:		
Laboratory and workshop supplies ($3.996.61:		
Aikenhead Hardware, Ltd., hardware	195 26	
American Hard Rubber Co., rubber	27 65	
Baines & David, steel	43 92	
Baird & Tatlock (London) Ltd., beakers, weights, tubing, etc.	974 28	
Beardmore Belting Co., belting	20 55	
British Oxygen Co., cylinders, coils, etc	528 74	
Brown's Copper & Brass Rolling Mills, brass rods	94 13	
The Bursar, postage supplied	36 00	
Prof. E. F. Burton, disbursements:		
Laboratory supplies, $20.15; car tickets, cables and sundries, $18.48	38 63	
Cambridge & Paul Instrument Co., calorimeter	21 15	
Canada Wire & Cable Co., lamp cord	32 54	
Canadian Carbonate Co., oxygen	5 00	
Canadian Johns Mansville Co., asbestos	28 99	
Canadian Metal Co., castings	82 89	
Central Electric Supply Co., lamps, etc	27 14	
Corning Glass Works, tubing	172 01	

33. *Physics Building and Department.*—Continued.

Driver & Harris Co., wire	$45 84
T. Eaton Co., towels, etc.	90 46
E. B. Eddy Co., matches	16 83
Chas. E. Goad Engineering Co., hydrometers and plates	10 41
G. M. Hendry Co., gauges, etc.	56 71
Adam Hilger Ltd., lantern plates	48 52
Imperial Foundry Co., weights	31 52
Ingram & Bell Ltd., plates	20 40
Kimble Glass Co., glass tubes	155 48
L'Air Liquide Society, Oxygen	13 66
Lake Simcoe Ice Co., ice	54 58
Lyman Bros. & Co., chemicals, etc.	55 00
Geo. A. Matthews, repairs to motor	10 40
W. MacDonald, wheel	5 67
McKay School Equipment Ltd., bottles and chemicals	15 68
W. R. McKee, repairs to motor	8 15
New Method Laundry, laundry	39 67
Ontario Rubber Co., tubing	65 11
Perkins, Electric Co., lamp and carbons	17 94
Perkins & Ladd Electric Ltd., carbons	9 35
Chas. Potter Co., carbons	8 50
W. G. Pye & Co., thermometers, etc.	82 15
J. G. Ramsey & Co., plates	93 01
T. G. Rice Wire Mfg. Co., wire closk	7 00
Ryrie Bros. Ltd., repairs to watches	23 50
Standard Foundry Co., castings	81 07
Students' Book Dept., paper, etc.	13 75
A. T. Thompson & Co., lens	8 05
United Typewriter Co., inspection, etc.	18 48
A. R. Williams Machinery Co., drills	22 39
University Press, printing and stationery	201 82
Petty items (11)	20 70
Freight charges, etc.	96 45
Superintendent's Dept., labour, $42.24; material, $177.24	219 48
Apparatus ($2,980.51):	
Aikenhead Hardware Co., torch	12 15
Baird & Tatlock (London) Ltd., pumps, cylinders, etc.	150 00
Bausch & Lomb Optical Co., mirror	4 56
British Oxygen Co., purifying apparatus	709 62
A. E. Dean & Co., rectifier, etc.	79 42
J. J. Griffin & Sons, battery cells, etc.	143 32
G. M. Hendry Co., pipettes	4 27
Adam Hilger Ltd., lenses, etc.	44 23
E. Leybold's Nachfolger, troughs, etc.	30 37
W. G. Pye & Co., balances, electrometer, telescope, etc.	1,378 97
J. G. Ramsey & Co., lens	14 70
H. V. Short Hardware Co., wrench	2 97
Thermal Syndicate Ltd., lamps	14 89
H. Tinsley & Co., galvanometer, etc.	151 57
Veeder, Mfg. Co., counters	5 33
W. E Whitehead, hair dryer	25 00
Freight charges, etc	209 14
Experimental tables, cases, books, charts, etc., ($1,003.45);	
American Institute of Mining & Metallurgical Engineering, books	5 66
Art Metropole, print	3 61
Macmillan & Co., subscriptions	13 32
Office Specialty Mfg. Co., sections	122 06
J. G. Ramsey & Co., slides	14 85
R. Robertson & Sons, table	170 00
Students' Book Dept., books	11 50
Taylor & Francis, books	21 90
Wireless Press Ltd., subscriptions	11 19

33. *Physics Building and Department.*—Continued.

University Press, printing	$13 15	
Superintendent's Dept., labour, $421.29; material, $194.92	616 21	
Workshop assistance ($4,190.68):		
V. Dowdell, 4 weeks at $7.00 per week	28 00	
Wm. Kirby, 16 weeks, 20 days, at $10.00 per week	178 18	
S. H. Love, 7½ weeks at $10.00 per week	75 00	
A. Peachy, 2 weeks at $10.00, $20.00; 10 weeks at $12.00, $120.00; 21 weeks, 3½ days, at $15.00 per week, $325.00	465 00	
N. Seymour, 4½ weeks at $10.00 per week	45 00	
Jas. Ward 10½ months at $150.00, $1,575.00; 3½ days at $7.00 per day, $24.50	1,599 50	
John Young, 12 months to 30 June	1,800 00	
	12,171 25	
Less credit for damages, Canadian Express Co	22 00	
		$12,149 25
		$18,106.70

34. *Sub-Department of Astronomy.*

Maintenance ($336.58):		
Prof. C. A. Chant, disbursements, office and laboratory supplies	$ 25 52	
Adam Hilger, Ltd., plates	27 84	
Photography, Dept. of, slides and prints	47 73	
J. G. Ramsey & Co., paper	14 52	
University of Chicago Press, slides	10 84	
Unversity Press, printing and stationery	98 20	
Petty items (4)	10 54	
Freight charges, etc	3 86	
Superintendent's Dept., labour, $56.27; material, $41.26	97 53	
Apparatus ($374.55):		
Baush & Lamb Optical Co., eyepiece	7 78	
J. A. Brashear Co. Ltd., account camera lens	268 77	
Century Telephone Construction Co., transformers	36 00	
W. K. Simpson, making sphere, 77½ hours at 80c	62 00	
		$711 13

35. *Geological Department.*

Maintenance ($500.10):		
Allen Mfg. Co., laundry	$ 6 03	
Wm. Bartlett & Son, shades, etc	86 51	
W. F. Ferrier, geological reports, etc	86 70	
Grand & Toy, Ltd., pencils, etc	30 00	
J. F. Hartz Co., glasses	5 40	
Ingram & Bell Ltd., chemicals	28 64	
Office Specialty Mfg. Co., cards	13 00	
Prof. W. A. Parks, disbursements:		
Car expenses, $52.12; bulletins, etc., $18.62	70 74	
Photography, Dept. of, prints and slides	23 41	
Provincial Treasurer, auto license	13 00	
J. G. Ramsey & Co., paper, etc	13 49	
University Press, printing and stationery	57 40	
Superintendent's Dept., labour, $16.83; material, $48.95	65 78	
Artists' Services ($298.00):		
E. B. S. Logier, drawings	188 00	
G. Ross Workman, drawings	10 00	
	698 10	
Less credits for breakages	4 40	
		$693 70

36. *Mineralogical Department.*

Maintenance, supplies and apparatus ($1,547.97)		
Wm. Bartlett & Son, shades	$19 45	
Bausch & Lomb Optical Co., microscopes, etc	582 68	
E. Boubee Fils, specimens	18 01	
British Drug House, Ltd., chemicals	31 50	
Canadian Laboratory Supplies, bottles, etc	176 21	
C. F. Cole, drawing supplies	53 02	
Eimer & Amend, wire, chemicals, etc	136 40	
Empire Laboratory Supplies, chemicals	14 83	
Grand & Toy, fyles	9 90	
Ernest Leitz, specimens	18 52	
Lyman Bros., test tubes	11 14	
Norton Co., aluminium	5 38	
Office Specialty Mfg., guides, etc	13 82	
Fraser S. Reid, gold specimens	90 34	
Spencer Lens Co., illuminators	27 80	
Ward's Natural Science Establishmest, specimens	21 39	
Prof. T. L. Walker, disbursements:		
Laboratory supplies, $26.62; postage and sundries, $9.73	36 65	
Will Corporation, asbestos	6 87	
University Press, printing and stationery	82 00	
Petty items (8)	19 66	
Freight charges, etc	44 82	
Superintendent's Dept., labour, $45.09; material, $147.66	192 75	
	1,612 84	
Less sundry credits—breakages	64 87	
		$1,547 97

37. *Philosophical and Psychological Departments.*

(a) Philosophy:		
Incidental expenses ($15.05):		
University Press, stationery		15 05
(b) Psychology		
Maintenance ($588.92):		
Dr. C. K. Clarke, disbursements:		
Laboratory supplies, $37.96; postage and sundries, $11.99	49 95	
T. Eaton Co., tables	35 65	
Grand & Toy Ltd., cases	8 25	
Hardware Co. of Toronto, hardware	47 90	
Harvard Appartus Co., paper	9 79	
Geo. M. Hendry Co., blackboard	9 31	
Lockhart's Camera Exchange, plates	71 65	
Office Specialty Mfg. Co., cards	8 76	
Standard Foundry Co., castings	7 00	
C. H. Stoelting Co., tests and weights	97 97	
Students' Book Dept., stationery	33 33	
Toronto Plate Glass Importing Co., glass	5 05	
University Press, printing and stationery	25 10	
Petty items (3)	10 92	
Freight charges, etc	5 52	
Superintendent's Dept., labour, $65.25; material, $97.52	162 77	
Apparatus and equipment ($786.75):		
Art Metropole, ruler	25 25	
Canadian General Electric Co., motor	24 88	
Consolidated Optical Co., testing latern	63 33	
Edison Swan Electric Co., testing lantern	24 22	
Hardware Co. of Toronto, hardware	11 40	
Harvard Appartus Co., electrical clock, etc	77 82	
Johns Hopkins University, chronoscope, etc	174 63	
Lockharts' Camera Exchange, lamp	12 50	

37. *Philosophical and Psychological Departments.*—Continued.

Stewart Products Service Ltd., speedometer	$12 18	
C. H. Stoelting Co., stopwatches	292 24	
Veeder Mfg. Co., counters	20 50	
Petty items (2)	6 39	
Freight charges, etc.	9 76	
Superintendent's Dept., material	31 65	
Flooring, etc. ($520.72):		
Wm. Bartlett & Son, shades	35 63	
Routery Bros., lathing and plastering	64 80	
Superintendent's Dept., labour, $327.14; material, $93.15	420 29	
		$1,896 39
		$1,911 44

38. *Mathematical Department*

Classroom supplies ($61.69):		
Lowe-Martin Co., tray and guides	6 71	
Office Specialty Mfg. Co., cabinet	24 98	
University Press, stationery	30 00	
		$61 69

39. *Sub-Department of Mechanics.*

Supplies and apparatus ($332.56):		
G. C. Cooper, iron rings	15 00	
F. Davidson & Co., micro-telescope, etc.	83 19	
Hardware Co., of Toronto, rope, hardware, etc.	23 24	
C. S. L. Hertzberg, drawings	75 00	
T. Slack, making tops	10 00	
Students' Book Dept., note books, etc.	31 20	
University Press, stationery and printing	19 45	
Freight charges, etc	3 48	
Superintendent's Dept., labour, $49.35; material, $22.65	72 00	
		332 56

40. *Political Science Building and Department.*

(a) Maintenance of Building:		
Fuel ($434.30):		
W. H. Cox Coal Co., fuel	412 50	
Ridout & Bethune, teaming	21 80	
Gas and city current ($13.19):		
Consumers' Gas Co.	13 19	
Water ($15.14)		
City Treasurer	15 14	
Caretaker's supplies ($67.83)		
Superintendent's Dept., labour, 90c.; material, $66.93	67 83	
Cleaning ($302.90):		
Canadian Cleaning Co., cleaning windows	2 90	
Superintendent's Dept., labour	300 00	
Repairs and renewals ($307.72):		
Commins-Moffatt Ltd., roofing	68 00	
University Press, stationery	15	
Superintendent's Dept., labour, $187.76; material, $51.81	239 57	
	1,141 08	
Less sundry credits (cleaning)	47 00	
		$1,094 08
(b) Maintenance of Department:		
Office and classroom supplies ($330.09):		
The Bursar, postage supplied	10 00	
Dominion Paper Box Co., boxes	16 84	
Prof. J. Mavor, disbursements, magazine subscriptions	14 05	
Moody's Investors' Service, books	56 90	

40. *Political Science Building and Department.*—Continued.

United Typewriter Co., inspection	$6 75	
University Press, printing and stationery	87 30	
Superintendent's Dept., labuor $94.48; material, $43.77	138 25	
Clerical assistance ($325.75):		
Miss H. MacDonnell, 651½ hours @ 50c.	325 75	
		655 84
		$1,749 92

41. *History.*

Classroom supplies ($31.75):		
University Press, cards and stationery	31 75	
Clerical Assistance ($300.00):		
Miss C. Adams, 16 weeks, 4 days, @ $18.00 per week	300 00	
		331 75

42. *Italian and Spanish Departments.*

Classroom supplies ($37.06):		
Photography, Dept. of, slides	6 50	
Student's Book Dept., book	8 16	
University Press, printing and stationery	22 40	
		37 06

43. *University College Departments.*

Greek:		
(Nothing spent)		
Latin ($15.65):		
University Press, printing and stationery	15 65	
Ancient History ($14.40):		
Students' Book Dept., books	14.40	
English ($13.50):		
University Press, stationery	13 50	
French ($246.62):		
Grand & Toy Ltd., card cabinet	84 50	
Office Specialty Mfg. Co., sections	82 92	
Photography, Dept. of, slides	4 00	
Student's Book Dept., books	43 20	
University Press, printing	31 50	
Superintendent's Dept., material	40	
German:		
(Nothing spent.)		
Orientals ($52.75):		
Canadian Post Card Co., book	18 55	
Students' Book Dept., books	30 15	
University Press, stationery	4 05	
Ethics ($10 40):		
Prof. F. Tracey, disbursements:		
Typing, $9.80; postage, 60c.	10 40	
		353 32

44. *University College General Expenses.*

Stationery, printing and incidentals ($333.15):		
The Bursar, postage supplied	30 00	
J. M. Dent & Sons, dictionary	4 55	
Toronto Weekly Railway and Steamboat Guide, subscriptions	13 50	
United Typewriter Co., ribbons	3 25	
University Press, Printing and stationery	81 10	
Superintendent's Dept., labour, $113.00; material, $87.75	200 75	
Advertising ($14.58):		
Evening Telegram	10 08	
Toronto Daily Star	4 50	

44. *University College General Expenses.*—Continued.

Typewriter and Duplicator ($561.47):		
Office Specialty Mfg. Co., desk	$80 58	
United Typewriter Co., typewriters	267 30	
University Press, mimeograph	213 59	
		909 20

45. *Trinity College Service.*

The Bursar, Trinity College, students' car fares for transportation to University lectures		899 32
		$570,371 54

III. Faculty of Medicine.

46. *Salaries.*

Dr. A. Primrose, Dean, 12 mos. to 30 June (paid also $700 as Professor)	$1,500 00	
Professor J. J. R. MacLeod, Associate Dean, 12 mos. to 30 June (paid also in Physiology)	1,500 00	
		$3,000 00

Anatomy.

J. P. McMurrich, Professor, 12 mos. to 30 June (paid also $300 for Special Lectures and $200 as Chairman of Board of Graduate Studies)	6,000 00	
J. C. Watt, Assistant Professor, 12 mos. to 30 June	3,500 00	
Assistants (Sessional):		
R. O. Fisher	150 00	
R. E. Gaby (paid also in Surgery)	150 00	
H. L. Rowntree	150 00	
Wallace A. Scott (paid also in Surgery)	150 00	
F. W. Weston	150 00	
A. S. Lawson (paid also in Surgery)	100 00	
H. B. VanWyck	100 00	
G. W. Carleton	50 00	
H. A. Cates	50 00	
R. M. Janes	50 00	
J. C. Maynard	50 00	
K. G. McKenzie	50 00	
L. C. Palmer	50 00	
L. Bruce Robertson	50 00	
L. A. Pequegnat (paid also in Biology)	50 00	
E. E. Shouldice (paid also in Surgery)	50 00	
I. R. Smith	50 00	
P. D. Spohn (paid also in Biology)	50 00	
E. A. McCulloch	50 00	
F. V. Stock	50 00	
Miss G. Dowsley, Technical and Clerical Assistant, 12 mos. to 30 June	550 00	
G. Lynne, Laboratory Assistant and Caretaker, 2 mos. @ $1,100 per annum; 10 mos. @ $1,450	1,391 67	
Laboratory Attendant and Assistant Caretaker: Robt. Eades, 8 1/3 weeks @ $17	141 48	
H. McCormick, 30 August to 30 June @ $28 per week	1,222 67	
		$14,405 82

Pathology and Bacteriology.

J. J. Mackenzie, Professor, 12 mos. to 30 June	$6,000 00	
H. B. Maitland, Assistant Professor, 12 mos. to 30 June	2,700 00	
Fellows (Sessional)		
G. C. Cameron	1,000 00	
W. P. Warner	1,000 00	

46. *Salaries.*—Continued.

W. L. Robinson, Demonstrator and Assistant Curator of Pathological Museum (Sessional)	$250 00	
Assistants (Sessional)		
I. H. Erb	100 00	
A. B. LeMesurier (paid also in Surgery)	100 00	
A. Mackay	50 00	
G. F. Laughlen	50 00	
G. R. Philp	50 00	
F. Thibault, Technician, 12 mos. to 30 June	1,200 00	
A. Wilson, Laboratory Assistant, 12 mos. to 30 June (paid also $750 as caretaker, Pathological building)	600 00	
Laboratory attendants for preparing media: Miss E. A. Gordon, 3 mos. @ $55 54; 8 mos. @ $70	726 65	
A Meyers, 4 mos. @ $37; 8 mos. @ $45	508 00	
Miss I. E. Ruttan, Stenographer, 12 mos. to 30 June	1,050 00	
		$15,384 65

Pathological Chemistry.

V. J. Harding, Professor, 12 mos. to 30 June	$4,800 00	
C. G. Imrie, Assistant Professor, 3 mos. to 30 September @ $2,350 per annum (resigned)	587 50	
D. H. Boddington, Assistant in Clinical Laboratory (Sessional)	500 00	
Fellows (Sessional):		
O. H. Gaebler (paid also $200 in Special Research	1,000 00	
C. T. Potter	1,000 00	
A. P. Hart (transferred to Pediatrics 1 January)	187 50	
W. S. Quint (Easter Term)	312 50	
P. E. Faed, Demonstrator (Sessional—withdrew 31 January)	250 00	
T. Richardson, Laboratory Assistant, 12 mos. to 30 June	1,000 00	
Laboratory Attendants:		
Mrs. M. Davis, 12 mos. to 30 June (part time)	303 87	
L. Sutton, 12 weeks @ $10; 25 weeks, 4 days @ $12	428 00	
		$10,369 37

Pharmacy and Pharmacology.

V. E. Henderson, Professor, 12 mos. to 30 June	5,000 00	
N. C. Sharpe, Assistant Professor, 11 mos. to 30 June, @ $2,700 per annum	2,475 00	
Class Assistants (Sessional):		
J. A. MacDonald	275 00	
Miss D. Birkett	100 00	
J. C. Hallamore	75 00	
A. Brock, Laboratory Assistant, 3 mos. @ $1,050 per annum; 9 mos. @ $1,200	1,162 50	
S. Lloyd, Cleaner, 9½ mos. from 16 September @ $75 per month of which half charged to Bio-Chemistry	356 25	
Miss J. Deas, Secretary and Librarian, 10 mos. salary	900 00	
		$10,343 75

Medicine and Clinical Medicine.

D. Graham, Professor, 12 mos. to 30 June	10,000 00	
Associate Professors, each 12 mos. to 30 June:		
J. T. Fotheringham	700 00	
W. B. Thistle	600 00	
G. Chambers	450 00	
H. B. Anderson (without salary)	.....	
W. Goldie (without salary)	.....	
Clinicians (Annual):		
W. R. Campbell	2,500 00	
H. K. Detweiler	2,500 00	
R. G. Armour, 6 mos. @ $2,500 per annum	1,250 00	
A. A. Fletcher	1,500 00	

46. *Salaries.*—Continued.

R. Jamieson, 11 mos. @ $1,500 per annum	$1,375 00	
N. M. Keith, 3 mos. to 1 Oct. @ $1,500 per annum (resigned)	375 00	
Clinicians (Sessional-without salary):		
G. F. Boyer	.....	
A. W. Canfield	.....	
A. H. W. Caulfield	.....	
F. A. Clarkson	.....	
E. E. Cleaver	.....	
H. A. Dixon	.....	
J. H. Elliott	.....	
A. M. Goulding	.....	
N. Gwyn	.....	
B. Hannah	.....	
G. W. Howland	.....	
H. S. Hutchison	.....	
J. D. Loudon	.....	
D. McGillivray	.....	
A. J. Mackenzie	.....	
A. G. McPhedran	.....	
J. H. McPhedran	.....	
W. Fletcher McPhedran	.....	
C. S. McVicar	.....	
F. S. Minns	.....	
E. A. Morgan	.....	
L. Murray	.....	
W. Ogden	.....	
J. A. Oille	.....	
T. J. Page	.....	
H. C. Parsons	.....	
G. Pirie	.....	
C. A. Rae	.....	
F. W. Rolph	.....	
C. Sheard, Jr.	.....	
D. K. Smith	.....	
G. E. Smith	.....	
H. Spohn	.....	
E. J. Trow	.....	
G. S. Strathy	.....	
G. S. Young	.....	
Demonstrators, Clinical Microscopy (Sessional):		
G. W. Lougheed	250 00	
A. B. Moffat, Assistant	100 00	
Technicians:		
L. Heddick, 1 July to 31 Dec. @ $1,500 per annum (resigned)	750 00	
Miss P. D. Denne, 17 Jan'y to 30 June @ $900 per annum	412 50	
C. G. Dix, 3 mos. @ $50; 2 mos. @ $75	300 00	
Miss R. E. Ratz, Chemistry, 12 mos. to 30 June	1,000 00	
Secretarial Assistants @ $75 per month;		
Miss D. Murray, 2 mos. to 31 August (resigned)	150 00	
Miss M. Harvie, 9 mos. from 1 October	675 00	
Sub-Department of Pediatrics:		
Alan Brown, Associate Professor (without salary)	....	
Chemists (Annual)		
Miss A. Courtney	2,500 00	
Miss I. F. MacLachlan, Assistant	1,500 00	
Research Fellows, each 6 mos. from 1 January @ $100 a month		
Miss G. Boyd	600 00	
A. P. Hart, (transferred from Pathological Chemistry)	600 00	
	$30,087 50	
Charged to Eaton Endowment	$17,087 50	
		$13,000 00

46. *Salaries.*—Continued.

Surgery and Clinical Surgery.

Professors, each 12 mos. to 30 June:		
I. H. Cameron (retired)	$1,050 00	
A. Primrose (paid also as Dean)	700 00	
Associated Professors, each 12 mos. to 30 June:		
G. A. Bingham	700 00	
H. A. Bruce	700 00	
F. N. G. Starr	700 00	
C. L. Starr (Orthopedics)	700 00	
W. McKeown	700 00	
S. M. Hay	450 00	
Associates, each 12 mos. to 30 June:		
C. B. Shuttleworth	300 00	
J. F. Uren	300 00	
G. Silverthorn (paid also $700 as Professor of Medical Jurisprudencce	300 00	
W. E. Gallie	300 00	
Wallace A. Scott (paid also in Anatomy)	300 00	
W. W. Jones	300 00	
E. S. Ryerson (paid also as Secretary to Faculty)	300 00	
Demonstrators (Sessional):		
M. H. V. Cameron	250 00	
F. A. Cleland	250 00	
R. E. Gaby (paid also in Anatomy)	250 00	
O. R. Mabee	250 00	
J. A. McCollum	250 00	
A. S. Moorhead	250 00	
A. H. Perfect	250 00	
J. A. Roberts	250 00	
D. E. Robertson	250 00	
N. S. Shenstone	250 00	
G. R. Wilson	250 00	
A. B. Wright	250 00	
Assistants (Sessional):		
H. W. Baker	150 00	
R. R. Graham	150 00	
C. H. Hair	150 00	
B. Z. Milner	150 00	
C. B. Parker	150 00	
Robin Pearse	150 00	
L. B. Robertson	150 00	
H. E. Clutterbuck	100 00	
G. M. Dale	100 00	
G. C. McIntyre	100 00	
Temporary Assistants (Sessional)		
E. C. Beer	50 00	
W. A. Costain	50 00	
C. H. Gilmour	50 00	
R. I. Harris	50 00	
A. S. Lawson (paid also in Anatomy)	50 00	
H. Harrison	50 00	
A. B. LeMesurier (paid also in Pathology)	50 00	
J. C. McClelland	50 00	
R. A. McComb	50 00	
T. A. Robinson	50 00	
E. E. Shouldice (paid also in Anatomy)	50 00	
J. S. Simpson	50 00	
R. H. Thomas	50 00	
F. E. Watts	50 00	
J. H. Wood	50 00	
		$12,900 00

46. *Salaries.*—Continued.

Obstetrics and Gynaecology.

B. P. Watson, Professor, 12 mos. to 30 June	$1,000 00	
Associate Professors, each 12 mos. to 30 June		
K. C. McIlwraith, Obstetrics	450 00	
F. W. Marlow, Gynaecology	350 00	
W. B. Hendry	350 00	
J. A. Kinnear, Associate, 12 mos. to 30 June	300 00	
J. G. Gallie, Demonstrator (Sessional)	200 00	
Assistants (Sessional):		
N. D. Frawley	150 00	
W. W. Lailey	150 00	
Wm. A. Scott	150 00	
R. W. Wesley	150 00	
Miss M. Bonham, Laboratory Technician, 12 mos. to 30 June	850 00	
		$4,100 00

Opthalmology.

J. M. McCallum, Professor, 12 mos. to 30 June	$700 00	
Demonstrators (Sessional):		
W. H. Lowry	150 00	
D. N. Maclennan	150 00	
Assistants (Sessional)		
F. Aylesworth	100 00	
M. Lyon	100 00	
W. W. Wright	100 00	
C. Hill	50 00	
		$1,350 00

Oto-Laryngology.

D. J. G. Wishart, Professor, 12 mos. to 30 June	$700 00	
Associate Professors (without salary):		
G. Royce	.....	
P. Goldsmith	.....	
G. M. Biggs, Associate (without salary)		
Assistants (Sessional—without salary):		
E. Boyd	.....	
J. C. Calhoun	.....	
A. Campbell	.....	
C. Clark	.....	
A. A. Halliday	.....	
H. G. McKechnie	.....	
Jean Sproule-Manson	.....	
		$700 00

Therapeutics.

R. D. Rudolf, Professor, 12 mos. to 30 June	$1,000 00	
C. E. C. Cole, Demonstrator (Sessional)	250 00	
W. V. Watson, Assistant (Sessional)	100 00	
S. Johnston, Demonstrator, Anaesthesia (Sessional)	250 00	
Assistants, Anaesthesia (Sessional):		
W. H. Carveth	100 00	
T. R. Hanley	100 00	
J. J. Hurley	100 00	
M. D. McKichan	100 00	
C. H. Robson	100 00	
T. D. Archibald	50 00	
		$2,150 00

Hygiene.

J. G. Fitzgerald, Professor, 12 mos. to 30 June, (paid also in Connaught Antitoxin Laboratories)	$4,000 00
R. D. Defries, Assistant Professor, 12 mos. to 30 June, (part time—paid also in Connaught Antitoxin Laboratories)	1,000 00

46. *Salaries.—Continued.*

D. T. Fraser, Lecturer (Sessional)	$2,500 00	
Demonstrators (Sessional—part time):		
J. G. Cunningham, Industrial Hygiene	600 00	
H. M. Lancaster, Sanitary Chemistry	500 00	
P. J. Moloney (paid also in Connaught Antitoxin Laboratories	500 00	
Miss B. K. E. Mossop, Technical Assistant (Sessional)	1,000 00	
Miss M. T. Allen, Secretary-Stenographer, 9 mos. from 1 October @ $75 per mo.	675 00	
		$10,675 00

Psychiatry.

C. K. Clarke, Professor, 12 mos. to 30 June	$500 00	
H. Clare, Associate, 12 mos. to 30 June, $50; arrears as Demonstrator, 1919-20, $25	75 00	
Demonstrators (Sessional):		
D. R. Fletcher	25 00	
F. S. Vrooman	25 00	
		$625 00

Miscellaneous.

G. Silverthorn, Professor of Medical Jurisprudence, 12 mos. to 30 June (paid also $300 in Surgery)	$700 00	
N. H. Beemer, Professor, (extra-mural) of Mental Diseases (without salary—resigned 30 June)	.....	
G. E. Richards, Associate, Radiology, 12 mos. to 30 June	300 00	
A. D. A. Mason, Demonstrator, Dental Surgery (Sessional), $50; arrears for 1919-20, $50	100 00	
		$1,100 00

Special Lectures.

Course in English and Philosophy:		
F. H. Kirkpatrick, Tutor in English Expression (Sessional)	$1,250 00	
Special Lecturers, Science and Civilization (Sessional):		
A. G. Huntsman	250 00	
J. P. McMurrich (paid also in Anatomy)	100 00	
H. Wasteneys (paid also in Bio-Chemistry)	100 00	
Miss M. E. Lowry, Assistant in English (Sessional)	250 00	
J. P. McMurrich, Lectures on History of Medicine (paid also in Anatomy)	200 00	
E. S. Ryerson, Secretary, Graduate Studies Committee, &c. (paid also as Secretary to Faculty)	1,450 00	
		$3,600 00

Secretary's Office.

E. S. Ryerson, Secretary to Faculty, 12 mos. to 30 June, @ $3,000, of which $300 charged to Surgery and $1,450 to Special Lectures	$1,250 00	
Miss Wilma Jones, Assistant, 12 mos. to 30 June	1,200 00	
Stenographers, each 12 mos. to 30 June:		
Miss O. Russell	1,200 00	
Miss A. P. Perry	950 00	
		$4,600 00
		$108,303 59

47. *Anatomical Department.*

Anatomical Material ($910.21)		
W. E. Baycroft	$16 00	
F. W. Matthews	335 34	
J. Minshull	22 00	
Paul & Bedford	16 00	
H. R. Ranks	240 00	

47. *Anatomical Department.*—Continued.

Shinn & Lippert	$16 00	
Wm. Speers	80 00	
J. T. Torriman	16 00	
Superintendent's Dept., labour, $59.08; material, $109.79	168 87	
Material for preservation, chemicals, etc. ($386.90)		
W. R. Brock Co., oil cloth	13 30	
Canadian Industrial Alcohol Co., methylated spirits	94 64	
J. F. Hartz Co., ligaments, etc.	77 40	
Ingram & Bell Ltd., chemicals	134 88	
Sanderson Pearcy & Co., paint	24 95	
Superintendent's Dept., methylated spirits	41 06	
Superintendent's Dept., material	67	
Incidental Expenses ($593.99)		
Aikenhead Hardware, hardware	8 79	
Allen Mfg. Co., laundry	21 42	
W. R. Brock Co., linen	17 16	
T. Eaton Co., towelling	14 00	
Grand & Toy, cabinet	16 00	
J. F. Hartz Co., carbon	15 00	
Hudson Parker Ltd., laboratory coats	78 54	
Ingram & Bell, chemicals	6 90	
Benjamin Spector, painting	79 91	
United Typewriter, inspections	7 50	
Wistar Institute of Anatomy and Biology, subscriptions and journals	35 34	
University Press, printing and stationery	30 75	
Petty items (3)	6 10	
Freight Charges etc.	12 09	
Superintendent's Dept., labour, $137.51: material, $106.98	244 49	
	$1,891 10	
Less Sundry Credits:—Sale of barrels, etc.	10 07	
		$1,881 03

48. *Pathology and Bacteriology.*

Chemicals and supplies ($2,269.40):		
J. Allen, meat	$80 32	
Allen Mfg. Co., laundry	37 76	
Art Emporium Ltd., rods etc.,	11 11	
Brown Bros., stationery	7 39	
The Bursar, postage supplied	15 50	
Canadian Carbonate Ltd., gas	44 60	
Canadian Industrial Alcohol Co., oxygen	179 56	
D. Forester, animals	60 50	
J. F. Hartz Co., cotton	5 80	
J. C. Hunt, guinea pigs	14 00	
Ingram & Bell, chemicals etc.,	908 64	
Lines & Co., rabbits	10 00	
J. McGillian, carrots	207 00	
Prof. J. J. MacKenzie, disbursements: Laboratory supplies, $29.78; stationery and sundries, $10.22	40 00	
Photography, Dept. of, slides	41 00	
A. Richards, repairs to sterilizer	7 50	
E. S. Souter, mice	18 50	
Toronto Produce Co., fodder	164 13	
United Typewriter Co., inspections	7 50	
Wm. Weber, mice	7 50	
White & Thomas, repairs to incubator	40 00	
University Press, stationery and printing	169 05	
Petty items (4)	11 92	
Freight Charges, etc.,	57 55	
Superintendent's Dept., labour, $48.87; material, $83.70	132 57	
Apparatus ($660.36):		
Columbia Graphophone Co., dictaphone	153 00	

48. *Pathology and Bacteriology.*—Continued.

J. F. Hartz, Co., tubes	$4 69	
Ingram & Bell, slides, syringes, needles etc.,	472 44	
International Equipment Co., repairs to armature	25 73	
A. Richards, iron box	4 50	
Microscopes ($5,000.00):		
Ingram & Bell,	5,000 00	
Care of Refrigerating Plant ($512.98)		
Canadian Ice Machine, cork covering	14 08	
Geo. A. Matthews, commutator, etc.	155 15	
Superintendent's Dept., labour, $277.43; material, $66.32..	343 75	
	8,442 74	
Less Sundry Credits:—Sale of barrels, etc.	18 48	
		$8,424 26

49. *Pathological Chemistry.*

Supplies ($956.03):		
Allen Mfg. Co., laundry	6 15	
Arlington Chemical Co., chemicals	12 32	
Art Metropole, blueprint	8 66	
Brown Bros., stationery	8 84	
Canadian Electro Products Co., acetic acid	6 53	
Canadian Laboratory Supplies, chemicals etc.,	247 20	
F. Cantlon, enlarging holes	4 00	
Chemistry, Dept. of, winchesters	12 00	
Eastman Kodak Co., hypochloride, etc.	30 14	
T. Eaton Co., pails	8 50	
Eimer & Amend, chemicals	20 63	
Grasselli Chemical Co., chemicals	63 86	
Ingram & Bell, apparatus, etc.	92 99	
Lyman Bros. & Co., drugs	23 94	
Chas. W. Mack, signs	12 85	
Mallinckrodt Chemical Works, chemical supplies	260 93	
Gordon Mackay & Co., cloth	7 07	
O. B. Stanton & Wilson Co., paper	11 45	
Special Chemicals Co., chemicals	20 84	
University Press, printing and stationery	20 80	
Freight Charges, etc.	14 84	
Superintendent's Dept., labour, $34.74; material, $26.75..	61 49	
Apparatus ($1,135.09)		
Canadian Laboratory Supplies, flasks etc.	116 09	
F. Cantlon, apparatus	89 50	
Emil Greiner Co., glass parts to apparatus	42 76	
Ingram & Bell, apparatus	621 80	
Chas. Lentz & Sons, tube	5 36	
C. M. Sorenson Co., calorimeters	192 72	
University Press, printing	61 35	
Superintendent's Dept., material	5 51	
Alterations and Repairs ($1,446.42):		
Superintendent's Dept., labour, $690.49; material, $755.93	1,446 42	
	$3,537 54	
Less refund, freight	1 90	
		$3,535.64

50. *Pharmacy and Pharmacology.*

Supplies ($1,155.73):		
Aikenhead Hardware, hardware	11 81	
Wm. Bartlett & Son, shades	17 92	
Burroughs Wellcome Co., chemicals	56 24	
Canadian General Electric Co., stereoptican	7 27	
Connaught Antitoxin Laboratories, Antitoxin Division animals	51 50	

50. *Pharmacy and Pharmacology.*—Continued.

Eimer & Amend, chemicals	$89 61	
J. A. Fontaine, frogs	105 00	
Harvard Apparatus Co., cement	16 48	
Professor V. E. Henderson, disbursements: Laboratory supplies and sundries, $32.75; food supplies, $12.27; express and laundry, $7.99	53 01	
Ingram & Bell, chemicals	6 63	
Lyman Bros. & Co., chemicals	8 42	
Merck & Co., chemicals	127 03	
John McGillian, carrots	10 00	
McKay School Equipment, chemicals	104 25	
National Drug & Chemical Co., chemicals	76 89	
Ontario Rubber Co., tubing	28 57	
A. Storrs & Bement Co., paper	41 51	
Tablet & Ticket Co., letters	17 78	
Toronto Dog & Cat Hospital, dogs	55 00	
Toronto Produce Co., fodder	40 90	
M. Wocher & Son, recording device	32 21	
University Press, stationery etc.	39 75	
Petty items (5)	14 36	
Freight charges etc. .....$	15 30	
Superintendent's Dept., labour, $25.91; material, $102.38	128 29	
Special Apparatus ($530.66):		
Canadian Laboratory Supplies, cylinders, etc.	72 86	
Eberbach & Son Co., piston recorders	61 50	
Ingram & Bell, syringes etc	17 84	
McKay School Equipment, flasks, dishes, sieves etc.,	378 46	
Maintenance of Shop in Physiological Department ($478.97):		
Aikenhead Hardware, hardware	239 78	
Hamilton Gear & Machine Co., crown gears	231 75	
Superintendent's Dept., labour	7 44	
Fitting up Laboratory ($1,484.67):		
Geo. A. Matthews, rewinding coil for motor	8 60	
Superintendent's Dept., labour, $694.86; material, $781.21	1,476 07	
		$3,650 08

51. *Department of Medicine.*

(a) Maintenance of Building (1 Queen's Park).

Fuel ($719.63):		
W. H. Cox Coal Co., fuel	378 11	
Dunlop Coal Co., fuel	324 72	
Ridout & Bethune, teaming	16 80	
Gas and City Current ($71.67):		
Consumers' Gas Co.,	41 08	
Toronto Hydo-Electric System	30 59	
Water ($45.53):		
City Treasurer	45 53	
Cleaning ($300.00):		
Superintendent's Dept., labour	300 00	
Caretaker's Supplies ($53.65)		
Superintendent's Dept., labour .90; material, $52.75	53 65	
Repairs and Renewals ($85.13)		
A. Matthews Ltd., repairs to roof	12 81	
Superintendent's Dept., labour, $59.84; material, $12.48	72 32	
	1,275 61	
Less Sundry Credits:—repairs	22 50	
		$1,253 11

(b) Maintenance of Department ($2,887.00):

Supplies and Apparatus ($1,205.23):	
Allen Mfg. Co., laundry	4 99
Allied Publishers Ltd., books	83 13

51. *Department of Medicine.*—Continued.

The Bursar, postage supplied	$16 50	
Canadian Laboratory Supplies, chemicals	8 14	
Connaught Antitoxin Laboratories, Antitoxin Division, animals	10 00	
Mrs. Davis, sundry cleaning	82 16	
Professor Duncan Graham, disbursements: Laboratory supplies	31 60	
Ingram & Bell, surgical instruments, chemicals, filter-paper etc.	484 44	
Geo. A. McCogne, animals	7 50	
A. McKinn, rabbits	39 75	
Office Specialty Mfg. Co., cards	12 64	
H. B. Post, plates	25 00	
C. Potter, stereoptican, etc.,	96 80	
J. G. Ramsey Co., plates	10 03	
Geo. Sparrow & Co., saucepans	7 00	
Synthetic Drug Co., mice	54 97	
H. B. Tapscott, guinea pigs	11 25	
University Press, printing and stationery	136 35	
Petty items (3)	8 15	
Freight charges, etc.,	11 58	
Superintendent's Dept., labour, $39.00; material, $24.25	63 25	
Sub-Department of Pediatrics		
Apparatus and supplies ($1,151.25)		
The Bursar, postage supplied	3 00	
Canadian Laboratory Supplies, evaporating dishes, bottles, etc.	51 60	
L. J. Cartwright, slides	38 25	
T. Eaton Co., cards	3 00	
Professor Duncan Graham, disbursements: Laboratory supplies	15 64	
Grand & Toy, stationery	4 00	
J. F. Hartz Co., condensors, tubing, chemicals, etc.,	129 12	
Hospital for Sick Children, slides	6 00	
Ingram & Bell, chemicals, tubing, flasks, thermometers etc.,	863 17	
Richards Glass Co., tubes	24 55	
Superintendent's Dept., material	12 92	
Books and Periodicals ($530.52)		
H. K. Lewis & Co., reprints	88 12	
McAinsh & Co., books	22 25	
Students' Book Dept., books	331 45	
University Press, binding	88 70	
	$4,140 11	
Charged to Eaton Endowment	2,887 00	
		$1,253 11

52. *Surgery.*

Supplies and Laboratory Expenses ($170.68)		
T. W. Butler, cabinet	$25 39	
J. F. Hartz Co., skeleton	54 00	
Geo. M. Hendry Co., chalk	6 86	
Professor A. Primrose, disbursements: supplies	12 30	
Superintendent's Dept., labour, $5.63; material, $4.00	9 63	
University Press, printing and stationery	62 50	
Apparatus ($20.79)		
J. G. Ramsey & Co., slide boxes	20 79	
		$191 47

53. *Obstetrics and Gynaecology.*

Supplies and Apparatus ($61.99)		
J. F. Hartz Co., knives, etc.	29 68	
Ingram & Bell, chemicals	6 56	

53. *Obstetrics and Gynæcology.*—Continued.

C. Potter, slide boxes	$5 00	
Robert Simpson Co., laboratory coat	6 00	
University Press, printing	14 75	
		$61 99

54. *Opthalmology.*

(Nothing spent.)

55. *Oto-Laryngology.*

Supplies and Apparatus ($175.25)		
F. Cantlon, frames	$12 00	
Geo. M. Hendry Co., blackboard	21 56	
Medical Stores, M. D. 2, supplies	5 00	
Dr. J. D. Morgan, viewing box and lamps	65 00	
Miss M. N. Roebuck, painting	63 15	
Petty items (2)	8 54	
		$175 25

56. *Therapeutics.*

Supplies and Apparatus ($53.45)		
J. F. Hartz Co., chemicals	$8 75	
Students' Book Dept., books	18 50	
Toronto General Hospital, cards	26 20	
		$53 45

57. *Hygiene.*

Supplies ($885.72)		
Bennett Letter House, circular letters	$12 05	
The Bursar, postage supplied	28 00	
Canadian Laboratory Supplies, chemicals	82 56	
Canadian Public Health Association, folders	15 00	
City of Toronto, Health Department, slides	12 00	
Digestive Ferments Co., chemicals	60 54	
T. Eaton Co., towelling	10 66	
Wm. Fenton, slides	45 60	
Dr. J. G. Fitzgerald, disbursements:		
Laboratory and office supplies	22 46	
Grand & Toy, cards	7 00	
J. F. Hartz Co., chemicals	56 87	
G. B. Henderson & Co., brokerage	5 90	
Hudson-Parker Co., coats	21 42	
Ingram & Bell, chemicals	288 77	
Lyman Bros. & Co., chemicals, tubes etc.,	43 84	
S. J. Manchester, charts	32 00	
The Map Co., map	5 10	
J. F. Raw, Ltd., drawing board	17 50	
United Typewriter Co., inspection	3 00	
W. O. Ward, meat	6 20	
University Press, printing and stationery	103 50	
Superintendent's Dept., material	5 75	
Apparatus ($1,030.38)		
Wm. Bartlett, shades	8 46	
Canadian Laboratory Supplies, instruments	11 87	
Canadian Office Appliance and Supply Co., line-a-time	19 50	
Wm. Fenton, wire baskets	77 30	
J. F. Hartz Co., syringes	7 35	
Geo. H. Hees Son & Co., shades	63 13	
Ingram & Bell, chemicals and instruments	266 07	
Pathescope of Canada., stereoptican	97 82	
Scientific Materials Co., test tube holders	215 19	
United Typewriter Co., typewriter	121 50	
University of Toronto, Engineering Society, rule	10 50	

57. *Hygiene.*—Continued.

Wrought Iron Range Co., boiler	$19 13	
Superintendent's Dept., labour, $41.28; material, $71.34 ..	112 62	
Alterations ($585.73)		
Superintendent's Dept., labour, $320.26; material, $265.47	585 73	
		$2,501 88

58. *Medical Jurisprudence.*

(Nothing spent.)

59. *Medical Building.*

Heat and light (supplied from Central Power Plant):		
Gas, city current and occasional fuel ($318.43):		
Consumers' Gas Co.,	$318 43	
Water ($649.54):		
City Treasurer	649 54	
Caretaker's supplies ($294.63):		
Superintendent's Dept., labour, $4.56; material, $290.07 ...	294 63	
Cleaning ($1,640.50):		
Allen Mfg., laundry	$4 80	
Canadian Cleaning Co., cleaning windows	50 00	
Superintendent's Dept., labour	1,585 70	
Repairs and renewals ($2,802.45):		
Wm. Bartlett & Son, repairs to shades	5 00	
City Treasurer, elevator license	5 00	
W. Hood, exterminating rats	5 37	
A. Matthews Ltd., felt and gravel roofing	575 00	
Routery Bros., lathing and plastering	11 70	
University Press, name-plates etc.,	1 50	
Superintendent's Dept., labour, $1,735.39; material, $463.49	2,198 88	
Alterations in basement for Women Students ($751.31):		
R. Robertson & Sons, cutting doorway, building wall	207 10	
Routery Bros., lathing and plastering	32 00	
Superintendent's Dept., labour, $492.51; material, $19.70 ..	512 21	
	$6,456 86	
Less Sundry Credits:		
Sale of lockers $38 50		
Cleaning , 34 80		
Repairs 16 43		
	89 73	
	$6,367 13	
Caretaker, Thos. Motton, 12 mos. to 30 June	1,400 00	
Assistant to caretaker, J. Cattle, 12 mos. to 30 June	1,000 00	
		$8,767 13

60. *Pathological Building.*

Heat and light ($5,904.26):		
Toronto General Hospital	$5,904 26	
Gas and City current ($1,122.08):		
Consumers' Gas Co.,	1,122 08	
Water ($396.02):		
City Treasurer	396 02	
Caretaker's supplies ($200.00):		
Superintendent's Dept., labour $4.00; material, $196.00 ...	200 00	
Cleaning ($1,239.45):		
Allen Mfg. Co., laundry	3 45	
Canadian Cleaning Co., cleaning windows	30 00	
Superintendent's Dept., labour	1,206 00	
Repairs and renewals ($601.86):		
Canadian Ice Machine Co., repairs	30 99	
City Treasurer, elevator license	10 00	
University Press, name plates	3 60	

60. *Pathological Building.*—Continued.

Superintendent's Dept., labour, $253.25; material, $304.02..	$557 27	
Caretaker, Alex. Wilson 12 mos. to 30 June (paid also as laboratory attendant)	750 00	
		$10,213 67

61. *General Expenses.*

Stationery, printing, postage, office supplies etc. ($2,649.40):		
Addresser-press, machine and stencils	$142 62	
The Bursar, postage supplied	241 44	
Canadian Office Appliance and Supply Co., line-a-time model	19 50	
Grand & Toy Ltd., chair cushions	3 80	
A. S. Hustwitt & Co., cabinet and stencils	22 00	
Might Directories Ltd., directory	15 30	
Dr. E. S. Ryerson, disbursements:		
Telegrams, $9.95; carfares $8.00	17 95	
Students Book Dept., Books	24 00	
United Typewriter Co., inspections	22 50	
University Press, printing and stationery	2,137 90	
Superintendent's Dept., labour, $1.35; material, $1.04	2 39	
Typewriters, Etc. ($255.15))		
United Typewriter Co., typewriter	255 15	
Furnishing room in Toronto General Hospital ($289.06)		
Murray-Kay Ltd., linoleum	79 50	
Office Specialty Mfg. Co., chairs etc., ...	132 86	
Superintendent's Dept., labour, $51.03; material, $25.67....	76 70	
Appropriation for Dean's Office ($488.43)		
Dr. A. Primrose, sundry disbursements	140 71	
Dr. J. J. R. MacLeod, sundry disbursements	57 07	
Secretary-Treasurer, Hart House, entertaining guests of Faculty of Medicine and special dinner	80 65	
Miss H. Sharpe, clerical assistance to Dean	210 00	
	$3,682 04	
Less sale of typewriters (2)	50 00	
		$3,632 04

62. *Summer Session in Medicine and Special Post-Graduate Courses.*

Remuneration to Instructors:	
(*a*) Summer Session ($1,520.00):	
H. W. Baker	$70 00
C. E C. Cole	70 00
H. K. Detweiler	70 00
J. G. Gallie	70 00
Wm. Goldie	70 00
R. R. Graham	70 00
W. B. Hendry	70 00
N. M. Keith	70 00
W. W. Lailey	70 00
O. R. Mabee	70 00
A. G. McPhedran	70 00
R. D. Rudolph	70 00
Wm. A. Scott	70 00
G. E. Wilson	70 00
A. B. Wright	70 00
G. S. Young	70 00
R. G. Armour	40 00
Angus Campbell	40 00
G. W. Howland	40 00
H. S. Hutchison	40 00
D. N. MacLennan	40 00
C. B. Parker	40 00
E. S. Ryerson	40 00
N. S. Shenstone	40 00
J. S. Simpson	40 00
J. Sproule-Manson	40 00

62. *Summer Session of Special Courses, etc.*—Continued.

(*b*) Course in Paediatrics ($240 00):	
G. A. Morgan	$40 00
G. A. Davis	30 00
R. Simpson	30 00
G. F. Boyer	25 00
I. Erb	25 00
G. Pirie	25 00
B. Hannah	20 00
A. H. Rolph	20 00
Geo. F. Smith	15 00
L. B. Robertson	10 00
(*c*) Post Graduate Course, December ($390.00):	
Wm. Goldie	33 75
R. A. Jamieson	33 75
L. Murray	33 75
John Oille	33 75
J. G. Gallie	22 50
W. B. Hendry	22 50
W. W. Lailey	22 50
K. C. McIlwraith	22 50
Wm. Albert Scott	22 50
B. P. Watson	22 50
G. A. Bingham	5 00
H. A. Bruce	5 00
F. A. Cleland	5 00
R. E. Gaby	5 00
W. E. Gallie	5 00
R. R. Graham	5 00
R. I. Harris	5 00
A. B. LeMesurier	5 00
O. R. Mabee	5 00
J. A. McCollum	5 00
A. S. Moorhead	5 00
C. B. Parker	5 00
A. Primrose	5 00
J. A. Roberts	5 00
D. E. Robertson	5 00
L. B. Robertson	5 00
E. S. Ryerson	5 00
N. S. Shenstone	5 00
E. E. Shouldice	5 00
C. B. Shuttleworth	5 00
C. L. Starr	5 00
F. N. G. Starr	5 00
G. E. Wilson	5 00
A. B. Wright	5 00
(*d*) Post Graduate Course, May ($333.00)	
R. Jamieson	28 00
L. Murray	28 00
John Oille	28 00
J. G. Gallie	20 00
W. B. Hendry	15 00
F. W. Marlow	15 00
K. C. McIlwraith	15 00
D. J. G. Wishart	11 25
Wm. Goldie	10 50
J. A. Kinnear	10 00
W. A. Scott	10 00
R. E. Gaby	9 45
W. E. Gallie	9 45
R. R. Graham	9 45
A. B. LeMesurier	9 45
A. S. Moorhead	9 45
D. E. Robertson	9 45
N. S. Shenstone	9 45

62. *Summer Session of Special Courses, etc.*—Continued.

C. B. Shuttleworth	$9 45	
C. L. Starr	9 45	
G. E. Wilson	9 45	
C. E. Hill	7 50	
W. H. Lowry	7 50	
W. W. Wright	7 50	
V. J. Harding	7 00	
W. W. Lailey	7 00	
G. M. Biggs	6 75	
G. Royce	4 50	
Sundry Expenses:		
The Bursar, postage supplied	65 36	
University Press, printing	164 30	
		$2,712 66
		$155,357 15

IV. Faculty of Applied Science.

63. *Salaries.*

C. H. Mitchell, Dean, 12 mos. to 30 June	$6,000 00	
		$6,000 00

Electrical Engineering.

Professors, each 12 mos. to 30 June:		
T. R. Rosebrugh	$5,700 00	
H. W. Price	4,800 00	
Lecturers (Sessional):		
W. S. Guest	2,810 00	
A. R. Zimmer	2,625 00	
Demonstrators (Sessional):		
W. H. Orr	1,100 00	
H. S. Brown	1,000 00	
S. K. Cheney	1,000 00	
W. A. Dancy	1,000 00	
R. D. Huestis	1,000 00	
A. L. Tennyson	1,000 00	
W. J. Nichol (4 months)	500 00	
Electricians:		
W. R. McKee, 12 mos. to 30 June	1,800 00	
G. Moir, Assistant, 18 Oct. to 30 June @ $700 per annum.	493 52	
T. R. Carter, Assistant, 3 weeks, 5 days @ $13.42 per week	49 86	
J. W. Lawson, Mechanician, 12 mos.' salary (paid also $800 in Special Research)	1,100 00	
		$25,978 38

Mechanical Engineering.

R W. Angus, Professor, 12 mos. to 30 June	$5,220 00	
L. M. Arkely, Associate Professor, 2 mos. to 31 Aug. @ $2,850 per annum (resigned)	475 00	
J. H. Parkin, Assistant Professor, Hydraulics, 12 mos. to 30 June (paid also $500 in Special Research)	2,700 00	
N. F. P. Death, Special Lecturer, 4 mos.	800 00	
U. C. Holland, Assistant, Machine Design (Sessional)	1,500 00	
H. A. Tuttle, Instructor, Thermodynamics (Sessional)	1,500 00	
Demonstrators, Thermodynamics (Sessional):		
R. C. Hardie	1,000 00	
A. L. Stewart	1,000 00	
H. K. Dutcher, Special Instructor, Hydraulics (Sessional)	1,200 00	
Demonstrators, Hydraulics (Sessional):		
N. G. McDonald	1,200 00	
J. J. Weicker	1,100 00	

63. *Salaries.*—Continued.

F. Hickey, Engineer and Machinist, 11 month's salary (paid also $150.45 in Special Research)	$1,650 00	
J. O'Connor, Assistant Machinist, 1112 hrs. @ 85¢	945 20	
W. Odd, Fireman, 1516 hrs. @ 55¢	833 80	
Laboratory Assistants:		
G. S. Laing, 3 mos. to 30 Sept. @ $1,200 per annum (transferred to Electrical Bldg.)	300 00	
F. Millen, 1368 hrs. @ 50¢	684 00	
		$22,108 00
Applied Mechanics.		
Professors, each 12 mos. to 30 June:		
J. McGowan	$5,100 00	
P. Gillespie	4,800 00	
C. R. Young, Associate Professor, 12 mos. to 30 June	3,840 00	
A. T. Laing, Assistant Professor (part time—paid also as Secretary to Faculty)	1,250 00	
S. G. Bennett, Lecturer, Commercial Engineering (Sessional—paid also $400 as Assistant Secretary to Faculty)	1,875 00	
Demonstrators (Sessional):		
C. A. Hughes (paid also $100 in Special Research)	1,000 00	
W. L. Sagar (half time—paid also $600 in Special Research)	500 00	
W. K. Simpson, Mechanician, 12 mos. to 30 June	1,750 00	
John Brown, Laboratory Attendant, 8 mos. salary	650 00	
		$20,765 00
Mining Engineering.		
H. E. T. Haultain, Professor, 12 mos. to 30 June	$5,700 00	
F. C. Dyer, Assistant Professor, 12 mos. to 30 June	2,700 00	
J. T. King, Lecturer (Sessional)	2,500 00	
W. F. Green, Demonstrator (Sessional)	1,000 00	
E. Tozer, Laboratory Assistant, 12 mos. to 30 June	1,100 00	
C. Waybrant, Laboratory Attendant, 7 mos. salary	700 00	
		$13,700 00
Metallurgical Engineering.		
G. A. Guess, Professor, 12 mos. to 30 June	$5,700 00	
Lecturers (Sessional):		
Wesley Austin, allowance for Session, part time	420 00	
J. E. Toomer	2,500 00	
J. Stark, Attendant, 9 mos. salary	540 00	
		$9,160 00
Ferro-Metallurgy.		
T. R. Loudon, Associate Professor, 12 mos. to 30 June	$3,720 00	
		$3,720 00
Surveying.		
L. B. Stewart, Professor of Surveying and Geodesy, 12 mos. to 30 June	$5,700 00	
W. M. Treadgold, Associate Professor, 12 mos. to 30 June	3,720 00	
S. R. Crerar, Assistant Professor, 12 mos. to 30 June	3,125 00	
Lecturers (Sessional):		
E. W. Banting	2,810 00	
J. W. Melson	1,875 00	
		$17,230 00
Applied Chemistry.		
J. Watson Bain Professor of Chemical Engineering, 12 mos. to 30 June	$5,100 00	
Associate Professors, each 12 mos. to 30 June:		
M. C. Boswell Organic Chemistry	3,900 00	

63. *Salaries.*—Continued.

E. G. R. Ardagh, Analytical Chemistry	$3,840 00	
C. S. Adams, Lecturer (Sessional—paid also $400 in Special Research)	1,800 00	
O. Rolfson, Assistant (Sessional)	1,400 00	
Demonstrators (Sessional):		
G. G. McDonald	1,200 00	
H. C. Soehner (paid also $300 in Special Research)	1,200 00	
Victor Thomson	1,200 00	
A. Hunt, Glass-blower, 8 Oct. to 30 June	1,098 00	
D. Sinclair, Laboratory Assistant, 12 mos. to 30 June	1,250 00	
Laboratory Attendants:		
J. Johnson, 11 mos. to 31 May @ $800 per annum	733 34	
J. Addison, 1 Oct. to 30 June @ $8.75 per week	347 10	
F. Coles, 1 Oct. to 18 June @ $8.75 per week	332 50	
		$23,400 94

Electro-Chemistry.

Demonstrators (Sessional):		
W. R. Fetzer	$1,500 00	
J. Kelleher, @ $1,300 of which $500 charged to Special Research	800 00	
E. A. Bishop, Lecture Assistant (Sessional..paid also as caretaker, Mining building)	100 00	
Laboratory Attendants @ $35 per month:		
J. Heffron, 1 Oct. to 7 Jan.	113 12	
G. Banton, 15 Jan. to 4 June	161 50	
		$2,674 62

Architecture.

C. H. C. Wright, Professor, 12 mos. to 30 June	$5,700 00	
Associate Professors:		
A. W. McConnell, 12 mos. to 30 June	3,720 00	
A. Berrington, 9 mos. to 30 June @ $3,500 per annum	2,625 00	
Lecturers (Sessional):		
H. H. Madill	2,310 00	
J. L. Banks, Modelling (part time)	1,000 00	
C. W. Jeffreys, Freehand Drawing (part time)	1,000 00	
F. E. Simpson, Assistant, Modelling (Sessional—half time)	500 00	
Miss J. C. Laing, Instructor and Librarian, 12 mos. to 30 June	1,200 00	
Attendants @ $75 a month:		
G. E. Drake, Modelling, 5 mos. to 28 Feb.	375 00	
F. J. R. Martin, 3 mos. to 31 May	225 00	
Special Lecturers (Sessional):		
H. B. Dunington-Grubb	200 00	
W. A. Langton	50 00	
		$18,905 00

Drawing.

C. H. C. Wright Professor (paid as Professor of Architecture)	....	
J. Roy Cockburn, Associate Professor, Descriptive Geometry 12 mos. to 30 June	3,900 00	
Lecturers (Sessional):		
W. J. Smither	2,625 00	
W. J. T. Wright	2,250 00	
Demonstrators (Sessional):		
H. J. Franklin (paid also $288 in Special Research	1,400 00	
E. R. Grange	1,400 00	
W. B. Dunbar (paid also $350 in Special Research)	1,200 00	
J. H. Curzon	1,000 00	
T. S. Graham	1,000 00	
C. E. Hastings	1,000 00	
W. A. Sibbett	1,000 00	

63. *Salaries.*—Continued.

A. C. Wilson	$1,000 00	
G. R. Workman	1,000 00	
L. C. M. Baldwin (resigned 31 Jan.)	600 00	
A. R. Mendizabel (2 mos.)	300 00	
A. Wardell (4 mos.)	600 00	
G. Brown, Attendant, 8 mos. salary	650 00	
Miss F. Stinson, Office Assistant, 18 Oct. to 28 June @ $18 to $20 a week (half time, balance in Engineering Physics)	350 00	
		$21,275 00

Engineering Physics and Photography.

G. R. Anderson, Associate Professor, 12 mos. to 30 June	$4,320 00	
Demonstrators (Sessional):		
K. B. Jackson	1,250 00	
J. T. Ransom	1,200 00	
Photographers:		
H. R. Jarvis, 33 weeks @ $20	640 00	
Miss M. Hines, Assistant, 33 weeks 4 days, @ $12 to $17 a week	512 35	
Miss F. Stinson, Office Assistant (see also Drawing)	350 00	
		$8,272 35

Special Lectures.

A. R. Clute, Lectures, Corporation Law and Limited Companies (paid also in Political Science)	$400 00	
		$400 00

Secretary's Office.

A. T. Laing, Secretary to Faculty and Librarian, 12 mos. to 30 June (paid also $1,250 in Applied Mechanics)	$2,750 00	
S. G. Bennett, Assistant Secretary, 4 mos. to 30 June @ $100 per month (paid also in Applied Mechanics)	400 00	
Miss E.Birkett, Record Clerk, 12 mos. to 30 June	1,050 00	
Stenographers, each 12 mos. to 30 June:		
Miss R. Cave	1,000 00	
Miss E. Myers	1,000 00	
		$6,200 00
		$199,789 29

64. *Mining Building.*

Heat and light (supplied from Central Power Plant):		
Gas, city current and occasional fuel ($1,304.24):		
Consumers' Gas Co.	$1,304 24	
Water ($251.42):		
City Treasurer	261 42	
Caretaker's supplies ($338.25):		
Superintendent's Dept., labour, $4.28; material, $333.97..	338 25	
Cleaning ($2,696.20):		
Canadian Cleaning Co., cleaning windows	50 00	
Superintendent's Dept., labour	2,646 20	
Repairs and renewals ($3,001.46):		
Automatic Telephones & Time Recorders Ltd., repairs	8 70	
Wm. Bartlett & Son, shades	172 96	
City Treasirer, elevator license	10 00	
Crescent Concrete & Paving Co., repairs	75 00	
A. Morton, wiring chairs	17 85	
Otis Fensom Elevator Co., repairing elevator	502 38	

64. *Mining Building.*—Continued.

L. J. Rogers, analyzing soap	$16 00	
University Press, name plates	15	
Superintendent's Dept., labour, $1,315.24; material, $883.18	2,198 42	
	7,591 57	
Less sundry credits:		
Gas, $859.68; water, $176.04; repairs, $93.74; cleaning, $49.75; light, $12.50	1,191 71	
	$6,399 86	
Caretaker, E. A. Bishop, 12 month to 30th June	1,400 00	
		$7,799 86

65. *Architectural Building (formerly Engineering Building, including Old Y.M.C.A. Building).*

Heat and light (supplied from Central Power Plant):		
Gas, city current and occasional fuel ($298.72):		
Consumers' Gas Co., gas	$85 87	
W. H. Cox Coal Co., fuel	212 85	
Water ($192.32):		
City Treasurer	192 32	
Caretaker's supplies ($223.65):		
Superintendent's Dept., labour, $4.21; material, $219.44	223 65	
Cleaning ($2,436.30):		
Canadian Cleaning Co., cleaning windows	54 00	
Superintendent's Dept., labour	2,382 30	
Repairs and renewals ($2,468.50):		
Anthracite Briquette Co., briquettes	28 00	
Wm. Bartlett & Son, shades	26 23	
Superintendent's Dept., labour, $1,489.45; material, $924.82	2,414 27	
Sundries: structural changes ($14,999.01):		
T. Eaton Co., cork carpet	74 25	
R. Robertson & Sons, cutting doorways, etc.	214 93	
Routery Bros., lathing and plastering	204 38	
Vulcan Asphalt & Supply Co., laying asphalt	410 00	
Superintendent's Dept., labour, $9,109.72; material, $4,985.73	14,095 45	
	$20,618 50	
Less sundry credits:		
Repairs, $25.76; cleaning, $13.60	39 36	
	$20,579 14	
Caretakers ($825.00):		
W. J. Graham, 12 months to 30th June (reduced service)	$525 00	
S. J. Apted, (supervision)	300 00	
Fireman ($62.00):		
R. Brown, 6 months, 6 days, at $10.00 per month (part time)	62 00	
		$21,466 14

66. *Electrical Engineering Building, (including Thermodynamics Bldg.)*

Heat and Light (supplied from Central Power Plant):		
Fuel for Experimental Plant ($2,308.12):		
W. H. Cox Coal Co., fuel	$2,149 03	
Ridout & Bethune, teaming	148 84	
Superintendent's Dept., labour	10 25	
Gas and city current ($20.70):		
Consumers' Gas Co.	20 70	
Water ($209.21):		
City Treasurer	209 21	

66. *Electrical Engineering Building, (including Thermodynamic Bldg.)*—Continued

Caretaker's supplies ($250.24):		
Superintendent's Dept., labour 99c.; material, $249.25	$250 24	
Cleaning ($1,136.63):		
Allen Mfg. Co., laundry	15 03	
Canadian Cleaning Co., cleaning windows	20 00	
Superintendent's Dept., labour	1,101 60	
Repairs and renewals ($1,295.82):		
University Press, name plate	15	
Superintendent's Dept., labour, $1,010.97; material, $284.70	1,295 67	
	$5,220 72	
Less sundry credits: Repairs, $74.22; light $2.00; cleaning, $2.00	78 22	
	$5,142 50	
Caretaker, G. S. Laing, 9 months to June 30th	1,050 00	
		$6,192 50

67. *Geodetic Observatory Building.*

Heat and Light (supplied from Central Power Plant):		
Water ($16.20):		
City Treasurer	$16 20	
Caretaker's supplies ($31.50):		
Superintendent's Dept., labour, $1.50; material, $30.00	31 50	
Cleaning ($92.60):		
Canadian Cleaning Co., cleaning windows	6 00	
Superintendent's Dept., labour	86 60	
Repairs and renewals ($593.94):		
Automatic Telephones & Time Recorders Ltd., repairs	8 70	
R. Robertson & Son, repairs to drain, etc.	217 98	
Superintendent's Dept., labour, $101.59; material, $265.67	367 26	
		$734 24

68. *Electrical Engineering Department.*

Supplies ($2,045.46):	
Aikenhead Hardware Ltd., hardware	$129 27
Baines & David, steel	48 39
Booth-Coulter Copper & Brass Co., copper and brass	106 42
Brown & Sharpe Mfg. Co., indicator, etc.	33 25
Canadian General Electric Co., fuses, wire, etc.	185 35
Diamond State Fibre Co., fibre rod	8 90
Dodge Mfg. Co., castings	21 08
T. Eaton Co., brushes	6 20
Hardware Co. of Toronto, hardware	218 32
Masco Co., lamps	45 79
John Morrow Screw & Nut Co., hardware	378 40
W. R. McKee, hydrometer	8 67
Peckovers Ltd., steel bars	10 60
E. A. Phillips Electrical Works, wire	146 81
Photography, Dept. of, prints	8 75
Prof. H. W. Price, disbursements: laboratory supplies and sundries	37 32
Trumbull Electric Mfg. Co., batteries, etc.	118 29
Victoria Paper & Twine Co., leatherette	7 55
Weston Electrical Instrument Co., coils	19 54
A. R. Williams Machinery Co., shaft	6 20
University Press, paper	14 75
Petty items (5)	16 17
Freight Charges, etc.	232 53
Superintendent's Dept., labour, $79.54; material, $157.37 ..	236 91
Apparatus ($2,026.10):	
Canadian General Electric Co., insulators	15 46

68. *Electrical Engineering Department.*—Continued.

Canadian Kron Scale Co., truck platform	$175 00	
Consolidated Instrument Co., speed indicators	94 61	
Dodge Mfg. Co., pulleys	18 84	
Electric Storage Battery Co.,couples and separators	388 41	
F. P. Fahy, permeameter	357 88	
General Radio Co., resistance box	49 50	
Gregory Electric Co., motors	113 86	
Instruments Ltd., voltmeter, etc.	250 00	
Leeds & Northrup Co., galvanometer	130 40	
Weston Electrical Instrument Co., repairs	397 10	
Freight charges, etc.	35 04	
Furniture, printing and incidentals ($250.00):		
Macey Office Equipment Co., desk	79 55	
University Press, printing	170 45	
Distribution panels in laboratories, equipping lecture rooms, etc. ($8,790.40):		
Adams Furniture Co., stools	93 84	
Bausch & Lamb Optical Co., baloptican	177 90	
Davis Slate Mfg. Co., slate	124 81	
Macey Office Equipment Co., furniture	544 20	
Northern Electric Co., supplies	6 88	
E. A. Phillips Electrical Works, cables	507 99	
Roller Smith Co., circuit breakers, etc.	482 47	
A. R. Zimmer, installation of equipment	300 00	
Freight charges, etc.	23 05	
Superintendent's Dept, labour, $3,752 37; material, $2,776.89	6,529 26	
Moving Expenses ($1,902.14):		
Goddard Bros., moving machinery	580 50	
Swedish General Electric Ltd., assembling motors, etc.	226 00	
Superintendent's Dept., labour $1,015.40; material, $80.24	1,095 64	
		$15,014 10

69. *Mechanical Engineering Department.*

Supplies ($843.39):		
Prof. R. W. Angus, petty disbursements	$9 53	
Aikenhead Hardware Ltd., hardware	14 46	
Applied Chemistry Dept., glass-blowing	11 50	
Baines & David, steel	13 78	
Beardmore Belting Co., cement	14 16	
Crosby Steam Gage & Valve Co., piston rods	102 82	
J. A. Devon, thermometers	24 42	
Garlock Packing Co., packing	89 07	
McColl Bros. Ltd., oil	36 78	
C. Potter, slides	19 28	
Photography, Dept. of, slides	109 69	
H. V. Short Hardware Co., hardware	160 42	
Wellman-Seaver Morgan Co., freight charges	11 74	
University Press, printing and stationery	43 20	
Freight charges, etc.	25 89	
Superintendent's Dept., labour, $72.28; material, $84.37	156 65	
Apparatus ($625.42):		
American La France Fire Engine Co., steam guage	51 00	
Babcock & Wilcox Ltd., grate bars	98 84	
Crosby Steam Gage & Valve Co., indicator	88 78	
Dominion Bridge Co., steel plates	10 34	
T. Eaton Co., cabinet	49 10	
Instruments Ltd., thermometers	19 10	
McKay School Equipment Ltd., balance weights	73 00	
Schaeffer & Budenberg, dials	81 29	
Students' Book Dept., books	41 20	
Freight charges, etc.	3 04	
Superintendent's Dept., labour, $73 77; material, $35 96	109 73	
		$1,468 81

70. *Applied Mechanics Department.*

Supplies ($839.13):		
Aikenhead Hardware Co., hardware	$32 38	
Baines & David, steel	65 04	
Beardmore Belting Co., belting	6 49	
Dodge Mfg. Co., pulley, shaft, etc.	32 53	
Hardware Co. of Toronto, hardware	13 11	
Geo. M. Hendry Co., blackboard	15 68	
J. C. McLaren Belting Co. Ltd., belting	31 21	
Office Specialty Mfg., section, etc.	51 00	
Photography, Dept. of, slides and prints	27 66	
Remington Typewriter Co., typewriter	40 00	
R. Robertson & Sons, cement	14 38	
Scientific Materials Co., rubber diaphragm	3 03	
H. V. Short Hardware Co., hardware	13 77	
Toronto Furnace & Crematory Co., test bars	12 12	
John Whitfield Co., steel brackets	60 13	
Petty items (3)	4 03	
Freight charges, etc.	4 68	
Superintendent's Dept., labour, $175.61; material, $236.28	411 89	
Apparatus ($1,206.18):		
Bausch & Lamb Optical Co., baloptican	85 77	
Beardmore Belting Co., belting	30 58	
Dodge Mfg. Co., extension bracket, etc.	93 18	
Wm. & J. G. Greey, pulley castings	7 14	
McGregor & McIntyre Ltd., steel frame, beams, etc.	302 12	
D. Robertson & Sons, concrete foundations	100 00	
Superintendent's Dept., labour, $327.69; material, $259.70	587 39	
Moving Expenses ($990.64):		
Goddard Bros., moving machinery	862 50	
Superintendent's Dept., labour, $98.54; material, $29.60	128 14	
		$3,035 95

71. *Mining Engineering Department.*

Supplies ($1,889.02):		
Aikenhead Hardware Ltd., hardware	60 82	
Allen Mfg. Co., laundry	6 78	
Canadian Johns-Manville Co., asbestos wood	11 64	
Canadian Laboratory Supplies, chemicals	98 61	
G. C. Cooper, grinding	5 00	
W. H. Cox Coal Co., fuel	63 65	
Denver Fire Clay Co., crucibles, etc.	336 19	
T. Eaton Co., towels, linoleum, etc.	147 57	
A. Fleming, ore	9 00	
Fletcher, Russell & Co., clay muffles, stoppers, etc.	142 02	
Goodyear Tire & Rubber Co., belting	36 94	
Grand & Toy Ltd., stationery	6 60	
B. Greening Wire Co., wire cloth	18 75	
Wm. & J. G. Greey, bolting cloth	24 25	
J. T. King, disbursements: laboratory supplies etc.	18 32	
Lyman Bros., chemicals	22 55	
Martin Sales Agency, soap dispenser	16 42	
Geo. B. Meadows Co., brass wire	30 77	
Morgan Crucible Co., supplies	73 63	
Ontario Lime Co., cement	7 31	
Solomon Schickler, ore	8 00	
Sturtevant Mills Co., ore	13 09	
Superior Mfg. Co., rubber stamps	7 95	
W. S. Tyler Co., paper	12 66	
Wm. Unswortr & sons, weights	29 88	
Will Corporation, jars, tubing, etc.	219 04	
University Press, printing and stationery	91 07	
Petty items (5)	17 48	
Freight charges, etc.	104 00	
Superintendent's Dept., labour, $97.65; material, $151.38	249 03	

71. *Mining Engineering Department.—Continued.*

Apparatus ($1,497.71):		
Aikenhead Hardware Ltd., hardware	$21 91	
Applied Chemistry Dept., balances	70 00	
Baines & David, plate	51	
Baird & Tatlock Ltd., cases, balances, etc.	294 92	
Denver Fire Clay Co., machines	346 53	
T. Eaton Co., microscope, etc.	38 00	
Gregory Electric Co., motor	51 55	
Mine & Smelter Supply Co., testing machine, motors, etc.	235 25	
Office Specialty Mfg. Co., transfer cases	24 48	
United Typewriter Co., repairs	26 80	
Superintendent's Dept., labour, $276.74; material, $111.02	387 76	
Work tables and lockers ($1,533.92):		
Superintendent's Dept., labour, $854.64; material, $679.28	1,533 92	
	$4,920 65	
Less credit	3 48	
		$4,917 17

72. *Metallurgical Engineering Department.*

Supplies ($1,031.33):		
Allen Mfg. Co., laundry	$5 88	
Denver Fire Clay Co., knives, tongs and muffles	188 23	
Eimer & Amend, cylinders, funnels, chemicals etc.	343 65	
Prof. G. A. Guess, disbursements: laboratory supplies	16 16	
Pringle & Booth, beaver board	13 26	
E. Pullan, waste	5 86	
J. G. Ramsey & Co., plates	12 61	
Scientific Materials Co., tubing, jars, etc.	124 14	
Toronto Hydro-Electric System, service	234 95	
Hiram Walker & Sons Metal Products, plates	46 51	
W. W. Wells, sulphate	5 56	
Freight charges etc.	34 52	
Apparatus ($1,210.26):		
T. Eaton Co., table	10 00	
Eimer & Amend, weights	33 04	
Johnson, Matthew & Co., wire	53 48	
W. M. Newcombe, grapite crucible	35 00	
E. P. Reichhelm & Co., furnace, etc.	248 12	
Scientific Materials Co., lamps	30 96	
Simplex Electric Heating Co., griddles	210 31	
A. H. Thomas Co., illuminator, mechanical stage, etc.	258 27	
Thermal Syndicate Ltd., tubing	216 86	
Freight charges, etc.	16 83	
Superintendent's Dept., labour, $24.34; material, $73.05	97 39	
Alterations and fitting up additional rooms ($7,246.16):		
R. Robertson & Sons, gas flue	157 34	
Superintendent's Dept., labour, $4,433.90; material, $2,654.37; telephone calls, 55¢	7,088 82	
		$9,487 75

73. *Surveying Department.*

Supplies ($73.66):	
Consolidated Optical Co., ranging poles	25 00
Instruments Ltd., blueprints	9 06
Photography, Dept. of, slides	17 40
Prof. L. B. Stewart, petty disbursements	10 00
University of Toronto Engineering Society, ink	1 70
University Press, stationery	4 50
Superintendent's Dept., labour, $2.20; material, $3.80	6 00
Apparatus ($1,393.00):	
Consolidated Optical Co., transits	833 00
S. R. Crerar, apparatus	15 00
Orville Rolfson, apparatus	545 00

73. *Surveying Department.*—Continued.

Constructing buildings for Summer Camp, furniture and utensils ($5,075.61):			
J. Austin & Sons, lumber		$596 72	
J. Blair, provisions		4 00	
S. R. Crerar, desks and chairs		200 00	
T. Eaton Co. Ltd., utensils		206 35	
Gowans, Kent & Co., utensils		315 55	
Adam Hall, Ltd., fire bricks		7 34	
D. J. Hartle, provisions		690 53	
Geo. M. Hendry Co., blackboards		55 08	
A. Langdon, lumber and punts		242 92	
John Leckie Ltd., rope		7 51	
E. A. Rogers, oilcloth, etc.		12 80	
C. Trumbull, milk		11 10	
Mrs. T. Trumbull, milk		5 00	
A. D. Watt & Son, tripods, etc.		147 60	
S. W. Welch, hardware		206 43	
H. A. Willett, stove		32 50	
E. Windover, provisions		79 02	
Wages (local workmen):			
Carpenters	$398 89		
Painters	260 91		
Labourers	228 66		
Cook	116 67		
		1,005 13	
Superintendent's Dept., labour, $909.80; material, $315.29; freight and sundries, $24.94		1,250 03	
Maintenance of Summer Camp, staff, travelling expenses and miscellaneous items ($5,010.24):			
S. R. Crerar, services, $675.00; living expenses, $199.50; travelling expenses, $36.65; sundries, $5.80		916 95	
E. W. Banting, services, $612.00; living expenses, $212.63; travelling expenses, $47.55		872 18	
J. W. Melson, services, $425.00; living expenses, $228.00; travelling expenses, $42.60; supplies purchased, $18.00		713 60	
W. M. Treadgold, services, $258.33 living expenses, $54.55		312 88	
Brown & Lindop, hire of car		220 48	
Parsons Brown, provisions		398 38	
Harris Abbatoir Co., meat		125 15	
D. J. Hartle, provisions		269 45	
C. Kirkwood, provisions		168 29	
Jas. Minto, ice		36 50	
S. W. Welch, provisions and hardware		319 40	
H. A. Willett, provisions		2 40	
E. Windover, provisions		73 08	
Sundry expenses: motor boat hire, transportation of students, etc.		28 00	
Wages:			
Jas. Minto, caretaker	$150 00		
W. Stamp, cook	125 00		
Mrs. N. Schrader, cook	125 00		
O. S Schrader, assistant	116 00		
W. A. Palmer, assistant	37 50		
		553 50	
		11,552 51	
Less received from students for board at Camp		1,296 81	
			$10,255 70

74. *Applied Chemistry Department.*

Supplies ($7,059.88):		
Aikenhead Hardware Co.	$25 02	
Allen Mfg. Co., laundry	13 62	
Prof. J. W. Bain, disbursements:		
Telegrams, $8.11; laboratory supplies and sundries, $3.12	11 23	

74. *Applied Chemistry Department.*—Continued.

Biological Dept., methylated spirits		$2 00
Boeckh Co., brushes		48 76
British American Oil Co., paraffine wax		6 46
Canada Metal Co., zinc rod		28 60
Canadian General Electric Co., motors		31 82
Canadian Laboratory Supplies, tubing, thermometers, chemicals, etc.		298 72
J Devon, thermometers		191 32
T. Eaton Co., plates		28 40
Freyseng Cork Co., corks		8 93
G. Goldstick, adjusting weights		32 50
Grasselli Chemical Co., chemicals		463 08
International Glass Co., tubing		167 63
L'Air Liquide Society, oxygen		67 62
Lake Simcoe Ice Co., ice		26 46
Lyman Bros. & Co., chemicals		464 98
Mallinckrodt Chemical Works, chemicals		222 18
Geo. A. Matthews, rewinding armature		51 30
McKay School Equipment Ltd., beakers, flasks, etc.		4,074 14
National Aniline & Chemical Co., chemicals		14 69
Norton Co., tubes		18 85
Ontario Rubber Co., tubing		12 26
Peckovers Ltd., steel		11 67
C. Potter, lenses		6 00
J. G. Ramsey & Co., plates		19 16
Richards Glass Co., bottles		12 15
Semet-Solvay Co., chemicals		15 17
Sheet Metal Products Co., pails		39 26
Robt. Simpson Co., bowls		8 28
Synthetic Drug Co., chemicals		10 00
Hiram Walker & Sons Metal Products, wire		18 90
University Press printing and advertising		81 35
Petty items (13)		35 66
Freight charges, etc.		84 96
Superintendent's Dept., labour, $203.87; material, $202.68		406 55
Apparatus ($995.54):		
J. A. Bryan, thermostat		55 10
Mrs. W. H. Ellis, case		50 00
Gregory Electric Co., motor		91 30
Leeds & Northrup Co., telescope, etc.		29 10
Geo. A. Matthews, rewinding armature		15 10
W. R. McKee, rheostat, etc.		59 68
Office Specialty Mfg. Co., desk		56 10
Standard Calorimeter Co., calorimeter		236 93
Superintendent's Dept., labour, $280.38; material, $121.85		402 23
Alterations and fitting-up additional rooms ($2,750.23):		
W. E. Lummis, rectifying outfit		1,524 92
Freight charges, etc.		58 22
Superintendent's Dept., labour, $602.69; material, $564.40		1,167 09
		10,805 65
Less sundry credits:		
Chemistry Dept., chemicals	$338 80	
Mining Engineering Dept., balances	70 00	
Mechanical Engineering Dept., glass-blowing	11 50	
Sundry sales	59 89	
		480 19
		$10,325 46

75. *Electro-Chemistry Department.*

Supplies ($1,307.48):	
Acheson Graphite Co., electrodes	$241 76
Allen Mfg. Co., laundry	9 87
J. T. Baker Chemical Co., chemicals	185 33

75. *Electro-Chemistry Department.*—Continued.

Baker & Co., cylinder	$6 42	
Booth-Coulter Copper & Brass Co., brass	6 16	
Canada Wire & Cable Co., wire	2 42	
Contractors' Supply Co., fire clay	10 20	
Chas. Cooper & Co., mercury	69 59	
Dominion Glass Co., bottles	26 92	
Electrical Allay Co. wire	51 87	
Eureka Mineral Wool & Asbestos Co., asbestos	25 54	
Grasselli Chemical Co. chemicals	83 70	
L'Air Liquide Society, oxygen	7.02	
Lake Simcoe Ice Co., ice	22 95	
Lyman Bros. & Co., chemicals	29 92	
Prof. W. Lash Miller, disbursements: Hardware and laboratory supplies, $61.39; and sundries, $12.08	73 47	
National Carbon Co., electrodes	223 35	
National Electro Products, hydrogen and rent of cylinder	8 51	
Ontario Lime Co., lime	5 25	
E Pullan, cloths	11 73	
Rainbow Lantern Slide Co., slides	5 00	
S. P. Scott, drawings	7.50	
Spanner Battery Separator Co., battery separator,	10 10	
University Press, printing	77 50	
Freight charges, etc.	27 98	
Superintendent's Dept., labour, $37.60; material, $39.82	77 42	
Apparatus ($1,347.37):		
Adjustable Skylight Works, stands	45 00	
Aikenhead Hardware Ltd., hardware	38 78	
Buffalo Apparatus Corporation, beakers, burettes, etc.	83 00	
Canadian General Electric Co., switches	8 28	
Canadian Kron Scale Co., truck scale	165 00	
Canadian Laboratory Supplies, tube	8 79	
McKay School Equipment Ltd., oven, tubes, etc.	132 83	
W. R. McKee, wire bridges, coils and repairs to apparatus	318 19	
Rogers Electric Co., switches, etc.	22 52	
Weston Electrical Instrument Co., micro-ammeters, etc.	230 99	
Will Corporation, stoppers, jars, etc.	36 39	
Freight charges, etc.	3 93	
Superintendent's Dept., labour, $131.59; material, $122.08	253 67	
Installing electric furnaces ($9,163.42):		
Davis Slate Mfg. Co., cutting marble	5 00	
Detroit Copper & Brass Rolling Mills, copper bar	745 32	
Falls Equipment Co., terminals, bushings, etc.	316 35	
Goddard Bros., cartage	79 50	
Meyer Bros., jar	12 12	
Pyrolectric Instrument Co., pyrovolter and transformers	1,093 13	
R.Robertson & Sons, reinforcing ceiling, work on gas flue etc.	762 24	
Toronto Hydro-Electric System, cable, etc.	183 36	
A. R. Williams Machinery Co., castings, punch and cable	39 16	
Freight charges, etc.	211 76	
Superintendent's Dept., labour, $3,296.91; material, $2,418.22; telephone calls, 35¢	5,715 48	
Alterations and fitting-up rooms ($220.79):		
Crescent Concrete Paving Co., concrete work	100 00	
Superintendent's Dept., labour, $69.74; material, $51.05	120 79	
		$12,039 08

76. *Architecture and Drawing Departments.*

(a) Architecture:		
Supplies ($541.38):		
Aikenhead Hardware Ltd., hardware	$55 73	
Allen Mfg. Co., laundry	5 79	
Art Metropole, supplies	7 79	

76. *Architecture and Drawing Department.*—Continued.

The Bursar, Postage supplied	$10 00	
T. Eaton Co., brushes, etc.	10 00	
Grand & Toy Ltd., stationery	8 80	
E. Harris Co. of Toronto, brushes	39 72	
Ontario Lime Co., lime	40 60	
Photography, Dept of, slides	142 50	
Robt. Simpson Co., wall paper	18 41	
Student's Book Dept., books	32 65	
University of Toronto Engineering Society, pencils, etc.	10 80	
University Press, stationery	21 33	
Petty items (4)	8 47	
Superintendent's Dept., labour, $18.18; material, $61.50; telephone calls, $1.45	81 13	
Sundry subscriptions:		
American Architecture	8 80	
Architectural Forum	7 82	
Architectural Review	6 96	
John Lane Co.	7 54	
McGraw-Hill Book Co.	9 68	
Chas. Scribners Sons	6 86	
Apparatus ($204.50):		
Aikenhead Hardware Ltd., hardware	41 78	
T. Eaton Co., portfolio	16 50	
Gramstorff Bros., cabinet prints	40 52	
Freight charges	70	
Superintendent's Dept., material	105 00	
Assistance and models for life class ($52.25):		
Prof. C. H. C. Wright, reimbursement for payment to models	52 25	
	$798 13	
(b) Drawing:		
Supplies ($171.99):		
Art Metropole, linen paper	19 91	
McGraw-Hill Book Co., books	11 25	
Students' Book Dept., supplies	14 95	
United Typewriter Co., inspection	7 75	
University Press printing and stationery	29 80	
Petty items (4)	8 32	
Superintendent's Dept., labour, $75.41; material, $4.60	80 01	
Apparatus ($237.81):		
Art Metropole, "T" Squares	20 85	
New York Blue Print Paper Co., pens	13 15	
Office Specialty Mfg. Co., sections, guides, etc.	47 43	
Students' Book Dept., book	3 80	
Toronto Wood Turning Works, hemisphere	20 20	
University of Toronto Engineering Society, set of squares, etc.	20 80	
Superintendent's Dept., labour, $58.61; material, $52.97	111 58	
Printing Instruction Sheets ($103.05):		
University Press, printing	103 05	
		$1,310 98

77. *Engineering Physics and Photography.*

(c) Engineering Physics:	
Supplies ($197.55):	
Connelly Iron Sponge & Governor Co., cell	$37 43
Cutten & Foster Ltd., lens	10 57
Eimer & Amend, chemicals	14 09
Geo. M. Hendry Co., hydrometer	12 60
Lake Simcoe Ice Co., ice	5 30

77. *Engineering Physics and Photography.*—Continued.

Lyman Bros. & Co., chemicals	$18 69	
Petty items (4)	12 24	
Freight Charges, etc.	16 14	
Superintendent's Dept., labour, $24.94; material, $45.55	70 49	
Apparatus ($473.38):		
Canadian Alvo Light Co., light	30 00	
Consolidated Optical Co., telescope-vibrometer	120 90	
Edison Storage Battery Co., cells	147 01	
A. Gallenkamp & Co., calorimeter	71 58	
G. M. Hendry Co., balance, etc.	42 89	
The Topley Co., binocular	61 00	
	$670 93	
(b) Photography:		
Supplies ($836.08):		
Ansco Co., plates	$83 85	
Canadian Kodak Co., plates	410 26	
C. F. Cole Co., paper	48 64	
T. Eaton Co., meters, towels, etc.	101 47	
Edison Swan Electric Co., lamps	20 00	
Lyman Bros. & Co., chemicals	35 32	
Perkins Electric Co., carbons	6 82	
Ramsey & Taylor, tripods	57 73	
University of Toronto Engineering Society, plates	19 72	
University Press, stationery	19 95	
Petty items (4)	7 87	
Freight charges, etc.	12 50	
Superintendent's Dept., labour, $7.95; material, $4.00	11 95	
Apparatus ($500.51):		
Ansco Co., printing machine	58 47	
Consolidated Optical Co., vibrometer and telescopes	180 00	
T. Eaton Co., camera, etc.	62 00	
Edison Swan Electric Co., reflectors, etc.	83 08	
Office Specialty Mfg. Co., desk, etc.	100 06	
Superintendent's Dept., labour, $6.05; material, $10.85	16 90	
	$2,007 52	
Less received for work done for various departments (including accounts receivable, $123.65)	1,061 99	
		$945 53

78. *General Expenses.*

Stationery, printing and office supplies ($2,795.47):		
D. A. Balfour., carbon paper	$16 67	
Brown Bros., loose leaf books	15 15	
The Bursar, postage supplied	256 50	
Department of Soldiers' Civil Re-Establishment typewriter stands	22 22	
Grand & Toy Ltd., fyles	15 85	
Prof. A. T. Laing, disbursements: Telegrams, $34.29; car fares and sundries, $4.65	38 94	
Lowe-Martin Co., cards	96 15	
Might Directories Ltd., directory	15 30	
Remington Typewriter Co., typewriter	125 55	
Wm. Tyrell & Co., encyclopaedia	10 00	
United Typewriter Co., inspections	48 30	
University Press, printing and stationery	2,121 70	
Petty items (3)	8 54	
Superintendent's Dept., labour,	4 60	
Lecture Lanterns ($89 89):		
The Topley Co., baloptican	89 89	
Clerical Assistance ($1,175 32):		
Miss D. Birkett, 39 2/3 weeks at $20.00 per week	792 66	
Miss D. Donley, 8½ weeks at $20.00 per week	170 00	

78. *General Expenses.*—Continued.

Miss N. Louch, 10 2/3 weeks at $20.00 per week	$212 66	
Messenger Service ($470.66):		
Victor Brown, 12 weeks at $8.00, $96.00; 25 2/3 weeks at $10.00, $256.66	352 66	
Jos. Heffron, 14 weeks, 5 days, at $8.00 per week	118 00	
		$4,531 34
		$309,313 88

V. Faculty of Household Science.

79. *Salaries.*

Household Science Department ($7,970.00):		
Miss A. L. Laird, Associate Professor, 12 mos. to 30 June (with rooms, heat and light valued at $280.00)	$3,720 00	
Miss H. Hill, Lecturer (Sessional)	2,000 00	
Miss F. Graper, Instructor (Sessional)	1,250 00	
Miss E. W. Park, Laboratory Assistant (Sessional—part time)	1,000 00	
Paid from Massey-Treble Bequest:		
Miss E. M. Hickmans, Lecturer (Sessional)	2,000 00	
Mrs. F. J. Nethercott, Research Worker (Sessional)	750 00	
	$10,720 00	
Less charged to Massey-Treble Bequest	2,750 00	
	$7,970 00	
Food Chemistry Department ($5,170):		
Dr. C. C. Benson, Associate Professor, Physiological Chemistry (also Secretary to Faculty), 12 mos. to 30 June (with rooms, heat and light valued at $280.00)	$3,720 00	
Miss C. M. Harwood, Instructor (Sessional)	750 00	
Miss E. F. D. Martin, Assistant (Sessional)	700 00	
		$13,140 00

80. *Household Science Building and Department.*

(*a*) Maintenance of Building:		
Heat and light (supplied from Central Power Plant):		
Gas, city current and occasional fuel ($325.60):		
Consumers' Gas Co.	$325 60	
Water (162.98):		
City Treasurer	162 98	
Caretaker's supplies ($199.03):		
Superintendent's Dept., labour, $4.55; material, $194.48	199 03	
Cleaning ($2,000.00):		
Canadian Cleaning Co., cleaning windows	30 00	
Superintendent's Dept., labour	1,970 00	
Repairs and renewals ($1,761.20):		
Automatic Telephones & Time Recorders Ltd., repairs	8 70	
City Treasurer, elevator license	5 00	
Italian Mosiac & Marble Co., repairs	130 20	
Johnson Temperature Regulating Co., valve diaphragms, etc.	26 10	
Routery Bros., plastering	34 50	
Superintendent's Dept., labour, $984.57; material, $572.13	1,556 70	
Sundries ($178.09):		
Wm. Bartlett & Son, shades	79 41	
Routery Bros., repairing wall	2 00	
Superintendent's Dept., labour, $92.63; material, $4.05	96 68	
Caretaker, F. Hanmer, 12 months to 30 June (with house, heat and light)	1,000 00	
	$5,626 90	

80. *Household Science Building and Department.*—Continued.

Less sundry credits:			
Cleaning	$56 30		
Sundries charged to Massey-Treble Bequest	178 09	234 39	
			$5,392 51

(*b*) Maintenance of Department:

(1) Household Science:

Laboratory Supplies ($700.67):		
Canadian Laboratory Supplies, chemicals		$39 34
Canadian Milk Products Ltd., milk		14 25
Wm. Davies Co., provisions		19 44
Farmers' Dairy Co., milk		18 42
Harris Abattoir Co., meat		14 70
Geo. M. Hendry Co., flasks, etc.		39 48
Lever Bros. Ltd., soap		26 66
Lyman Bros. & Co. Ltd., chemicals		9 76
McKay School Equipment, glassware		66 16
Ontario Rubber Co., tubing		5 29
W. J. Parks, groceries		8 21
A. Provan, groceries		417 94
Robt. Simpson Co. Ltd., sheeting		14 87
Petty items (2)		4 10
Superintendent's Dept., material		2 05
Laboratory attendance ($1,017.00):		
Mrs. Bowes, 9 months at $54.00; ½ month at $50.00		511 00
Miss Conacher, 9 months at $54.00; 2/5 month at $50.00		506 00
Equipment and incidentals ($250.35):		
Eimer & Amend, still		38 72
McKay School Equipment, delineascope		185 00
United Typewriter Co., inspections		3 75
Freight charges		64
Superintendent's Dept., labour, $5.75; material, $16.49		22 24
Sundries ($210.00):		
University Press, mimeograph		210 00
		$2,178 02
Less sundry credits:		
Breakages	$25 51	
Amount charged to Massey-Treble Bequest	210 00	235 51
		$1,942 51

(2) Food Chemistry:

Maintenance (693.89):	
Adams Furniture Co., stools	$35 10
American Hard Rubber Co., stoppers	9 92
J. T. Baker Chemical Co., chemicals	11 72
Dr. C. C. Benson, disbursements: Laboratory supplies and sundries, $28.91; food for analysis, $16.24; cleaning materials, $11.41	56 56
J. S. Chapman, spirometer	25 25
Consolidated Optical Co., repairs to balances	27 60
H. N. Elmer, apparatus	26 41
J. F. Hartz Co. Ltd., chemicals	44 97
Geo. M. Hendry Co., flasks, chemicals, etc.	100 20
Hynson, Westcott & Dunning, chemicals	3 17
Lyman's Ltd., chemicals	68 50
Lyman Bros. & Co., chemicals	71 50
McKay School Equipment, beakers, etc.	84 42
Stanyon Sales Co., test tubes	7 47
Students' Book Dept., books	12 65
A. H. Thomas Co., crucibles, etc.	28 07
University Press, stationery	13 55

80. *Household Science Building and Department.*—Continued.

Petty items (2)	$4 66	
Freight charges	4 31	
Superintendent's Dept., labour, $26.19; material, $31.67	57 86	
	$693 89	
Laboratory attendance ($353 48):		
Mrs. Bosley, 125 days at $2.80; 10½ hours at 30c. and car fare	353 48	
	$1,047 37	
Less credit for breakages	129 18	
		$918 19
(3) General Expenses:		
Stationery, printing, office supplies and incidentals ($85.50):		
The Bursar, postage supplied	$25 00	
University Press, printing and stationery	60 50	
Clerical assistance ($600.00):		
Miss Margaret Gould, 33 1/3 weeks at $18.00	600 00	
		$685 50
		$22,078 71

VI. Ontario College of Education.

81. *Salaries.*

	Payment to Officer.	Superannuation reservation under 7 Geo. V, Cap. 58.
Professors, each 12 mos. to June 30:		
W. Pakenham, Dean and Professor in School Administration, @ $6,000	$5,850 00	$150 00
H. J. Crawford, Classics, also Headmaster of University Schools, at $5,220	5,089 50	130 50
P. Sandiford, Educational Psychology, at 4,800	4,680 00	120 00
Assistant Professors, also Chief Instructors University Schools, each 12 mos. to 30 June:		
G. A. Cornish, Science, at $4,375	4,265 62	109 38
J. T. Crawford, Mathematics, at 4,375	4,265 62	109 38
G. M. Jones, English and History, at 4,375	4,265 62	109 38
W. C. Ferguson, Moderns, at $4,190	4,085 25	104 75
F. E. Coombs, Elementary Education, at $4,190	4,085 25	104 75
Assistant Professors:		
W. E.Macpherson, Education, 9 mos. to 30 June, at $4,190 per annum	3,063 94	78 56
Miss L. L. Ockley, Household Science and Supervisor of Women Students, 12 mos. to 30 June, at $3,000	2,925 00	75 00
Lecturers ,each 12 mos. to 30 June:		
S. W. Perry, Art and Commercial Work, also Chief Instructor in University Schools, at $3,875	3,778 13	96 87
A. N. Scarrow, Manual Training, also Instructor in University Schools, $3,560	3,471 00	89 00
Frank Halbus, Physical Training, also Instructor in University Schools, at $2,625 (paid also $150 in Gymnasium)	2,559 36	65 64
Miss A. E. Robertson, Instructor in Household Science, 9 mos. to 30 June, at $2,500 per annum	1,828 13	46 87
Instructors in University Schools, each 12 mos. to 30 June:		
T. M. Porter, at $3,875	3,778 13	96 87
H. A. Grainger, at $3,875	3,778 13	96 87
W. J. Lougheed, at $3,875	3,778 13	96 87
J. A. Irwin, at $3,750	3,656 25	93 75
W. H. Williams, at $3,750	3,656 25	93 75

81. *Salaries.*—Continued.

J. O. Carlisle, at $3,560	$3,471 00	$89 00
J. G. Workman, at $3,560	3,471 00	89 00
G. N. Bramfitt, at $3,250	3,168 75	81 25
G. A. Cline, at $3,250	3,168 75	81 25
W. L. C. Richardson, at $3,250	3,168 75	81 25
N. L. Murch, at $3,125	3,046 88	78 12
D. E. Hamilton,at $3,125	3,046 88	78 12
W. L. Daniher, at $2,810	2,739 75	70 25
P. Daniels, Substitute Instructor, University Schools, salary for 10 teaching months, at $200 per month	1,950 00	50 00
Miss L. Swinarton, Secretary, Dean's Office, 12 mos. to 30 June	1,400 00	
Miss Gladys Cotter, Clerk and Librarian, 4 mos. to 1 November (resigned), at $1,200 per annum	400 00	
Miss E. Fraser, Clerk in Headmaster's Office, 12 mos. to 30 June	1,000 00	
	102,891 07	2,566 43
		102,891 07
		$105,457 50

82. *Education Building and Department.*

(a) Maintenance of Building:			
Fuel ($3,591.78):			
W. H. Cox Coal Co.		1,271 19	
Dunlop Coal Co		1,047 10	
Scott-Millar Coal Co.		937 58	
Ridout & Bethune, teaming		298 81	
Superintendent's Dept., labour		37 10	
Light ($889.14):			
Consumers' Gas Co.		184 77	
Toronto & Niagara Power Co.		704 37	
Water ($381.66):			
City Treasurer		381 66	
Caretaker's Suppies ($600.04):			
Superintendent's Dept., labour		600 04	
Cleaning ($2,596.40):			
Canadian Cleaning Co., cleaning windows		56 00	
Superintendent's Dept., labour		2,540 40	
Repairs and renewals ($1,950.35):			
Wm. Bartlett & Son, shades		40 24	
Routery Bros., repairing ceiling		3 00	
Vulcan Asphalt & Supply Co., relaying steps		260 00	
University Press, name plates		45	
Superintendent's Dept., labour, ..$884.91; material, $751.75		1,636 66	
		10,009 37	
Less sundry credits:			
Cleaning	$76 70		
Light	33 00		
Repairs	67 44		
		177 14	
		9,832 23	
Engineer and caretaker, S. Hunter, 12 months to 30 June		1,600 00	
Fireman:			
C. V. Fly at $75.00 per month		537 10	
W. Odd, at 55c per hour		44 00	
			$12,013 33
(b) Maintenance of Department:			
Use of city schools ($1,000 00):			
Board of Education, City of Toronto		$1,000 00	

82. *Education Building and Department.*—Continued.

Observation in rural schools ($227.65):	
Public School Trustees, Newtonbrook, practice-teaching privileges	$150 00
J. B. Dandeno, honorarium as instructor	125 00
A. F. S. Gilbert, expenses re practice-teaching	20 75
A. B. Jackson, expenses re practice-teaching	20 35
Dean Pakenham, expenses of instructors and students re practice-teaching	11 55
Laboratory assistance ($102.60):	
Mrs. Cooper	12 00
Mrs. Hardy	20 70
Mrs. MacKerrigan	63 90
Mrs. Robertson	6 00
Office supplies, printing, postage and incidentals. ($1,223.97):	
D. A. Balfour Co., carbons	16 75
The Bursar, postage supplied	245 00
T. Eaton Co., desk	55 00
Field, Love & House, typewriter inspections	15 00
McKay School Equipment Ltd., erasers	17 64
Office Specialty Mfg. Co., folders	14 28
Dean Pakenham, disbursements: Telegrams and cables, $13.42; car fares, $6.75; office supplies and sundries, $13.56	33 73
Students' Book Dept., books	140 53
United Typewriter Co., inspections, ribbons, etc.	77 97
University Press, printing and stationery	742 80
General supplies and apparatus for class-room use, including lockers and furniture ($2,418.29):	
Acid Proof Ink Co., ink	12 00
Bureau of Educational Measurements, book	7 35
J. Castor, saws	7 25
S. A. Courtis, lists	5 46
T. Eaton Co., towelling, etc.	82 93
Geo. M. Hendry, school supplies	563 35
Gourlay, Winter & Leeming, rent of piano	46 00
Lyman Bros. & Co., chemicals	30 00
Methodist Book & Publishing C., slides	16 00
McKay School Equipment Ltd., chalk, etc.	7 65
T. Nelson & Sons, subscription	10 10
Oxford University Press, maps	31 52
Public School Publishing Co., books	9 45
"The School", volume	14 48
Students' Book Dept., note books	5 80
Teachers' College, Columbia University, N.Y., book	11 97
J. L. Vokes & Son, plaster of paris, etc.	18 59
Weston Electrical Instrument Co., galvanometer	59 58
Whaley, Royce & Co., books	12 12
Robt. M. Williams, engrossing diplomas	26 16
World Book Co., cards, books, etc.	21 07
University Press, printing and stationery	545 35
Petty items (11)	19 89
Superintendent's Dept., labour, $481.42; material, $238.08	719 50
Installation of Household Science Course, equipment and maintenance ($7,974.96):	
Adams Furniture Co., stools	31 50
Aikenhead Hardware Ltd., hardware	27 59
S. Bone, groceries	168 94
W. F. Campbell, lamps	25 00
Canadian Carbonate Co., gas	4 00
Canadian Fairbanks Morse Co., scales	220 97

82. *Education Building and Department.*—Continued.

Canadian Laboratory Supplies, chemicals	$127 52	
Cassidy's Ltd., dishes	104 39	
T. Eaton Co., tables, chairs, buffet, kitchen utensils, etc.	1,702 05	
Farmers' Dairy Co., milk	15 00	
Fielder Paper Box Co., boxes	5 79	
Fletcher Mfg. Co., pans	9 28	
Ham Bros. & Co., refrigerator	30 41	
Geo. M. Hendry Co., school supplies	308 31	
Kilgour Bros., paper	12 35	
Lake Simcoe Ice Supply Co.	5 00	
Lyman Bros. & Co., chemicals	28 52	
Meridan Britannia Co., utensils	199 43	
McKay School Equipment Ltd., thermometers, bottles, etc.	100 45	
McClary Mfg. Co., pans	96 99	
Northern Aluminum Co., utensils and pans	62 58	
Miss L. L. Ockley, disbursements, provisions and utensils	41 65	
Pathescope of Canada Ltd., film service	102 24	
W. J. Parks, groceries	19 19	
J. G. Ramsey & Co., slides	11 88	
Sheet Metal Products Ltd., pans	32 31	
R. Simpson & Co., glasses	5 70	
Singer Sewing Machine Co., machines	150 34	
J. B. Smith & Sons, lumber	131 58	
Students' Book Dept., books	278 10	
Toronto Pottery Co., clay	19 59	
Vokes Hardware Co., hardware	28 54	
University Press, printing	16 75	
Superintendent's Dept., labour, $1,657.88; material, $2,173.14	3,831 02	
Athletics ($830.24):		
Aura Lee Club, use of athletic grounds	200 00	
C. H. Murphy, attendant at rink	44 28	
Ryrie Bros., medals, bars and engraving	228 25	
A. G. Spalding & Bros., balls	19 80	
University Press, printing	77 45	
Superintendent's Dept., labour, $230.40; material, $30.06	260 46	
Lunch room equipment ($72.40):		
T. Eaton Co., utensils	40 70	
Planet Bicycle Co., trays	28 00	
Superintendent's Dept., labour, $1.90; material, $1.80	3 70	
Pianist's services at physical training classes ($26.00):		
Miss E. J. Craig, 8 period at 75c, $6.00; 20 periods at $1.00, $20.00	26 00	
Messenger service ($500.00):		
Miss E. Campbell, 12 months to 30 June	500 00	
Sundries ($380.34):		
H. J. Crawford, disbursements for Reception to parents	112 75	
W. E. MacPherson, expenses re transportation of effects from Kingston to Toronto	267 59	
	14,856 45	
Less credit for use of rink	60 00	
		$14,796 45
		$132,267 28

VII. Faculty of Forestry.

83. *Salaries.*

C. D. Howe, Dean and Professor, 12 months to 30 June	$5,000 00	
Associate Professors, each 12 months, to 30 June:		
J. H. White	3,750 00	
W. N. Millar	3,750 00	
Laboratory Assistants (occasional service).		
A. T. Davidson	240 00	
K. A. Stewart	57 50	
J. L. VanCamp	21 75	
Miss W. C. Wilson	20 00	
J. T. Turnbull	18 00	
Eric Druce	12 00	
Miss E. W. Mills, Secretary in Dean's Office, 12 mos. to 30 June	1,100 00	
		$13,969 25

84. *Forestry Building and Department.*

(*a*) Maintenance of Building:		
Fuel ($1,589.57)):		
W. H. Cox Coal Co., fuel	1,527 10	
Ridout & Bethune, teaming	62 47	
Light ($474.67);		
Consumers' Gas Co., ...	157 92	
Toronto & Niagara Power Co., ...	316 75	
Water ($80.87}:		
City Treasurer	80 87	
Caretaker's supplies ($121.69):		
Superintendent's Dept., labour, $1.45; material, $120.24	121 69	
Cleaning ($446.17):		
Allen Mfg. Co., laundry	7 17	
Canadian Cleaning Co., cleaning windows	7 00	
Superintendent's Dept., labour	432 00	
Repairs and renewals ($666.50):		
Superintendent's Dept., labour, $401.34; material, $261.16	662 50	
Petty items (2)	4 00	
Caretaker, George Ward, 12 months to 30 June	1,200 00	
	$4,579 47	
Less sundry credits: cleaning	4 00	
		$4,575 47
(*b*) Maintenance of Department:		
Laboratory supplies and apparatus ($1,982.24):		
Canadian Pad & Paper Co., paper	7 14	
Eugene Dietzen Co., traverse table, etc	91 13	
Dominion Glass Co., jars	7 14	
T. Eaton Co., jars	23 45	
Geo. M. Hendry Co., beakers, etc	61 43	
R. B. Hough, books	8 93	
Prof. C. D. Howe, petty disbursements	12 84	
J. G. Jack, specimens	5 61	
Lamotte Chemical Products Co., indicator field sets ..	8 61	
Lyman Bros. & Co., chemicals	9 66	
McKay School Equipment, microscopes and cylinders	1,332 95	
Photography, Dept. of, blue prints, etc.	18 90	
Rudd Paper Box Co., boxes	16 25	
L. V. Schmidt, specimens	31 29	
Students' Book Dept., books	20 00	
U. S. Department of Agriculture, slides	8 78	
Prof. J. H. White, disbursements:		
Laboratory Supplies, ...	30 38	
Petty items (2)	2 35	
Superintendent's Dept., labour, $143.04; material, $142.36	285 40	

84. *Forestry Building and Department.*—Continued.

Office supplies, etc. ($726.80):		
The Bursar, postage supplied	$40 00	
Canadian Office Appliance & Supply Co., line-a-time	19 50	
Dominion Press Clipping Agency, clippings	30 00	
Prof. C. D. Howe, disbursements: Telegrams and sundries, $29.79; stenographic services, $19.50	49 29	
Lowe-Martin Co., transfer cases	35 47	
Miss E. W. Mills, petty disbursements	10 21	
Office Specialty Mfg. Co., card sections, etc.	343 17	
United Typewriter Co., rent of machine and inspection	38 25	
Prof. J. H. White, petty disbursements	2 45	
University Press, printing	147 20	
Petty items (2)	4 20	
Freight charges, etc	2 52	
Superintendent's Dept., labour, $1.54; material, $3.00	4 54	
Practice Camp, maintenance, travel, etc. ($634.52):		
Prof. W. W. Millar, extra services, in connection with practice camp	156 25	
Prof. W. N. Millar, sundry disbursements: Provisions, $419.31; meals at Camp Mile, $55.00; camp equipment and supplies, $51.54; travelling expenses, $75.80; transportation of supplies, $99.58; honorarium to C. E. Hindson, Chief Fire Ranger, Temagami Forest Reserve, $50.00; cook's wages, September 14, to October 31, $196.00; sundries, $2.50; = $949.73; less students' deposits, $497.48; received for meals, $4.50 = $501.98	447 75	
J. L. Vokes & Sons, knives	6 57	
Prof. J. H. White, expenses re trip to Provincial Forest Nursery	14 25	
Allen Mfg. Co., laundry	7 50	
Yorkville Laundry, laundry	2 20	
Special Lectures ($50.00):		
Edward Beck, honorarium	25 00	
F. S. Newman, honorarium	25 00	
		3,393 56
		$21,938 28

VIII. 85. Faculty of Music.

Honoraria to Dean and Lecturers ($1,250.00):		
Dr. A. S. Vogt, Dean	$250 00	
F. A. Mouré, University Organist and Lecturer on History of Music (paid also as Bursar)	250 00	
Dr. Healey Willan, Lecturer on Theory of Music	250 00	
Dr. Albert Ham, Lecturer on Church Music	250 00	
H. A. Fricker, Lecturer on Choral and Orchestral Music	250 00	
Secretarial Allowance ($200.00):		
Miss A. W. Patterson (paid also as President's Secretary)	200 00	
Printing calendar, postage and incidental expenses ($256.18):		
The Bursar, postage supplied	60 00	
Nordheimer Piano & Music Co., rent of piano and cartage	20 00	
Office Specialty Mfg. Co., filing cabinet	72 88	
University Press, printing and stationery	103 30	
		$1,706 18

IX. University Extension and Social Service.

86. *University Extension and Publicity.*

(a) Summer Session, 1920 ($2,740.00):		
Remuneration to Instructors:		
C. E. Auger	$300 00	
E. A. Bott	60 00	

86. *University Extension and Publicity.*—Continued.

W. H. Clawson	$300 00
D. E. Hamilton	120 00
G. E. Jackson	300 00
H. S. McKeller	300 00
W. E. Macpherson	120 00
W. A. Parks	240 00
Miss F. M. Quinlan	125 00
P. Sandiford	300 00
J. Satterly	300 00
T. L. Walker	160 00
E. A. Wicker	40 00
G. R. Workman	75 00

(b) Correspondence Courses between Summer Sessions ($1178.50):

Remuneration to Instructors:

Faculty Entrance, Normal Entrance and Commerce ($689.50)

Wm. Baird	22 00
J. A. Buchanan	24 00
J. O. Carlisle	34 00
G. A. Cline	20 00
W. C. Ferguson	96 00
H. A. Grainger	15 00
G. M. Jones	18 00
W. J. Lougheed	105 00
Wm. Ward	60 50
W. H. Williams	187 50
J. G. Workman	107 50

Arts Course ($489.00):

C. E. Auger	6 00
A. Grant Brown	6 00
W. H. Clawson	6 00
W. A. Clemens	105 00
R. Flenley	15 00
F. C. A. Jeanneret	36 00
W. A. Kirkwood	6 00
R. M. MacIver	12 00
W. G. Smith	162 00
R. H. Williams	15 00
G. M. Wrong	120 00

(c) Local Lectures ($285.00):

	Total Payments	Fees and Expenses Paid by Local Centres	
Dr. R. G. Armour	$85 00	$40 00	$45 00
Dr. G. Boyer	15 00	10 00	5 00
E. F. Burton	13 00	5 00	3 00
Dr. W. R. Campbell	60 00	20 00	40 00
C. A. Chant	56 00	15 00	26 00
F. E. Coombs	21 00	. . .	21 00
G. A. Cornish	62 55	10 00	37 55
E. A. Dale	25 40	5 00	5 00
A. T. DeLury	15 00	5 00	5 00
Dr. J. G. Fitzgerald	33 75	10 00	13 75
L. Gilchrist	77 00	15 00	47 00
Dr. Wm. Goldie	40 00	10 00	30 00
Dr. Duncan Graham	40 00	10 00	30 00
Dr. G. Holland	30 00	20 00	10 00
L. E. Horning	88 25	35 00	13 25
C. D. Howe	13 00	5 00	3 00
Dr. G. W. Howland	40 00	10 00	30 00
M. Hutton	5 00	5 00	. . .
W. T. Jackman	22 25	5 00	7 25
G. M. Jones	30 10	5 00	15 10

86. *University Extension and Publicity.*—Continued.

D. R. Keys	$78 20	$20 00	$18 20
R. S. Knox	5 00	....	....
Miss A. L. Laird	13 30	5 00	3 30
H. S. McKellar	19 10	5 00	9 10
J. F. McLaughlin	5 00	....	....
A. MacLean	24 20	5 00	14 20
M. Moraud	13 25	5 00	3 25
W. A. Parks	13 00	5 00	3 00
Dr. E. S. Ryerson	20 00	10 00	10 00
P. Sandiford	85 20	25 00	35 20
Dr. D. King Smith	60 00	20 00	40 00
Dr. Geo. E. Wilson	20 00	10 00	10 00
W. S. Wallace	43 05	10 00	23 05
M. W. Wallace	68 15	25 00	13 15
	$1,239 75	$385 00	$569 75
Paid by local centres	954 75		
Paid by University			285 00

(d) Courses for Workers' Educational Association ($1,984.65):		
Workers' Educational Association, towards payment of Instructors		1,500 00
H. A. Innis, honorarium, $180.00; travelling expenses, $28.15		208 15
H. R. Kemp, honorarium, $120.00; travelling expenses, $37.20		157 20
The Bursar, postage supplied		1 25
University Press, printing		10 05
Sundry attendance:		
R. Brown		103 00
E. A. Bishop		2 50
J. Wicksey		2 50
(e) Short Winter Course for Farmers, ($65.11):		
Multigraphing Letter & Printing Co., printing, etc.		18 36
University Press, printing		46 75
(f) Tutorial Classes ($930 05):		
F. E. Coombs		150 00
Gilbert E. Jackson		225 00
Miss M. M. Waddington		200 00
M. W. Wallace		104 00
Miss Gladys E. Wookey		200 00
Sundry expenses:		
Mrs. Fairbrass, attendance		46 00
University Press, printing		5 05
(g) Publicity Work ($2,839.15):		
Printing and Distribution of Bulletins, etc. ($2,483.95):		
Brigden's Ltd., half-tones		48 39
The Bursar, postage supplied		120 00
Dominion Press Clipping Agency, clippings		30 00
M. J. Dunlop, disbursements:		
Bulk postage on bulletins, $383.25; addressing envelopes, $51.49		434 74
Elliott Co., stencils		30 85
P. E. McDonald, photo		3 00
United Typewriter Co., typewriter stand		6 50
Wilcox Engraving Co., engraving		5 05
University Press, printing and stationery		1,802 72
Petty items (2)		2 70
Travelling Expenses ($355.20):		
F. E. Coombs		3 50
W. J. Dunlop		87 90
C. E. MacDonald		15 60
J. C. McLennan		6 15
C. H. C. Wright		235 15
G. M. Wrong		6 90

86. *University Extensions and Publicity.*—Continued.

(h) Office Expenses ($6.825.04):		
W. J. Dunlop, Director, 12 mos. to 30 June	$3,000 00	
Miss H. M. Latter, Secretary, 12 mos. to 30 June	1,200 00	
Clerical Assistance:		
Miss H. I. Stratton, 8 mos. at $100.00, $800.00; 43 ½ days at $5.00, $217.50	1,017 50	
Miss C. Jacobs, 18 weeks at $15.00, $270.00; 9 days at $2.50, $22.50	292 50	
Miss E. Cook, 8 5/6 weeks at $15	132 50	
Miss Griffiths, 12 days at $3.00	36 00	
Miss Beatrice Malone, 12 days at $3.00	36 00	
Stationery, printing, office supplies and incidentals:		
J. B. Clark, filing section	24 50	
The Bursar, postage supplied	315 00	
W. J. Dunlop, petty disbursements:	8 45	
T. Eaton Co., card cabinet	13 00	
G. N. W. Telegraph Co., telegrams	4 62	
Photography, Dept. of, lantern operator	3 00	
Toronto Weekly Railway & Steamboat Guide, subscription	4 00	
United Typewriter Co., typewriter, etc.	162 45	
University Press, printing and stationery	376 80	
Petty items (3)	4 30	
Freight Charges, etc.	2 20	
Superintendent's Dept., labour, $28.55; material, $13.67	42 22	
Advertising Correspondence Work and Summer Session, 1921:		
"The School"	150 00	
	$16,847 50	
Less sale of bulletins	26 00	
		$16,821 50

87. *Social Service Building and Department.*

(a) Maintenance of Building:		
Fuel ($582.00):		
W. H. Cox Coal Co., fuel	540 00	
Ridout & Bethune, teaming	42 00	
Light ($22.70):		
Consumers' Gas Co.,	22 70	
Water ($21 98):		
City Treasurer	21 98	
Caretaker's supplies ($61.06):		
Superintendent's Dept., labour, .65c. material, $60.41	61 06	
Cleaning ($8.40):		
Canadian Cleaning Co., cleaning windows	8 40	
Repairs and renewals ($420.95):		
Superintendent's Dept., labour, $185.91; material, $235.04	420 95	
Caretaker R. Brown' 12 mos. to June 30	800 00	
	1,917 09	
Less sundry credits: cleaning	6 00	
	$1,911 09	
(b) Maintenance of Department:		
(1) Salaries ($8.810.00):		
J. A. Dale, Director and Professor of Social Service, 12 mos. to 30 June	4,800 00	
Miss A. C. McGregor, Director of Field Work, 12 mos. to 30 June	1,560 00	
Lecturers:		
Miss Florence Emory	400 00	
H. L. Brittain	200 00	
Miss L. W. Brooking	200 00	

87. *Social Service Building and Department.*—Continued.

E. K. Clarke	$200 00	
Miss A. F. Hodgins	200 00	
F. N. Stapleford	200 00	
Miss M. Yates	200 00	
N. L. Burnette	150 00	
P. R. Haywood	150 00	
Miss A. C. McGregor	150 00	
Mrs. L. A. Dunington-Grubb	100 00	
H. Mitchell	100 00	
J. W. MacMillan	100 00	
E. J. Pratt	100 00	
(2) Expenses ($1,566.39):		
Clerical Assistance ($846 67):		
Miss K. Anderson, 42 ½ weeks at $20.00	846 67	
Travelling Expenses ($75.00):		
Miss A. C. McGregor, expenses to National Conference of Social Work, Milwaukee	75 00	
Office supplies, printing, postage and incidentals, ($444.67):		
Association of Training Schools, subscription	5 57	
The Bursar, postage supplied	112 00	
Prof. J. A. Dale, disbursements:		
Telegrams, stationery and sundries	15 00	
Evening Telegram, advertising	5 00	
Macey Office Equipment Co., cabinets	47 25	
Photography, Dept. of, slides, $9.20; lantern operator, $8.00	17 20	
Miss Edna Tustin, pianist's services	16 50	
United Typewriter Co., inspections	6 00	
University Press, printing and stationery	192 30	
Petty items (6)	15 25	
Superintendent's Dept., labour, $10.65; telephone calls, ($1.95)	12 60	
Special Lectures ($200.05):		
E. T. Devine	150 05	
J. H. Falk	50 00	12,287 48
		$29,108 98

X. Residences.

88. *Men's Residences.*

Heat and light (supplied from Central Power Plant):		
Water ($308.57):		
City Treasurer	308 57	
Caretaker' supplies ($330.41):		
Superintendent's Dept., labour, $3.08; material, $327.33	330 41	
Cleaning and house service ($5,701.19):		
Puritan Laundry Co., laundry	935 73	
Superintendent's Dept., labour	4,765 46	
Repairs and renewals ($1,989.24):		
Wm. Bartlett & Son, shades	11 83	
Routery Bros., repairs to ceiling	13 50	
Superintendent's Dept. labour, $909.06; material $1,054.86	1,963 92	
	8,329 41	
Less sundry credits (repairs)	92 15	
		$8,237 26

89. *Women's Residences.*

(1) Queen's Hall Group:		
(*a*) Maintenance of Building:		
Fuel ($5,486.21):		
W. H. Cox Coal Co., fuel	4,837 25	

89. *Women's Residences.*—Continued.

Dunlop Coal Co., fuel	$487 08
Ridout & Bethune, teaming	161 88
Light ($736.58):	
Consumers' Gas Co.	438 11
Toronto & Niagara Power Co.	298 47
Water ($246.83):	
City Treasurer	246 83
Repairs and renewals ($2,604.45):	
Wm Bartlett & Son, shades	66 79
A. Matthews Ltd., repairs to roof, etc.	42 25
R. Robertson & Sons, repairs to masonry	24 59
Routery Bros., plastering	215 10
Superintendent's Dept., labour, $1,510.65; material, $745.07	2,255 72
	9,074 07
(*b*) Housekeeping Account:	
Provisions and housekeeping expenses ($12,746.39):	
Armstrong & Paffard, groceries	1,075 52
Campbell Flour Mills Co., flour	101 05
Canada Bread Co., bread	814 69
Christie, Brown Co., biscuits	18 63
City Dairy Co., ice cream	133 25
Geo. Coles, Ltd., cake, pastry, etc.	274 97
Wm. Dawson & Son, magazines	6 80
T. Eaton Co., groceries	125 80
Farmers' Dairy Co., milk	1,239 36
Gourlay, Winter & Leeming, hire of pianos	121 50
Gunns Ltd., meat	466 84
S. Harris, provisions	580 20
Harris Abattoir Co., meat	3,705 97
H. J. Heinz Co., pickles	11 22
Lake Simcoe Ice Supply Co., ice	182 00
Geo. Lister, provisions	736 23
Miss L. Livingstone, disbursements: Postage, $30.89; hemstitching, etc., $14.69; hardware, sharpening knifes, etc., $12.65; food supplies, $7.56; car fares and sundries, $9.21	75 00
Maple Leaf Milling Co., flour	18 45
Medland Bros., groceries	217 00
P. Milligan, subscription	5 40
A. A. McKinnon, provisions	405 30
Wm. Patterson & Sons, provisions	14 10
F. Simpson & Sons, provisions	83 05
Robt. Simpson & Co., groceries, etc.	69 09
John Sloan & Co., provisions	600 34
Students' Book Dept., cards	10 95
A. Thompson & Son, groceries	79 10
Todhunter, Mitchell & Co., coffee	257 86
White & Co., provisions	251 80
Whyte Packing Co., provisions	919 06
University Press, printing and stationery	61 85
Petty items (2)	4 20
Superintendent's Dept., material	79 81
Cleaning and House Service ($7,504.28):	
Allen Mfg. Co., laundry	128 75
Baillie's Laundry, laundry	139 71
Canadian Cleaning Co., cleaning windows	45 00
T. Eaton Co., cleanser	83 65
Evening Telegram, advertising for maids	10 80
A. H. Harraden, cleaning rugs	10 00
Harron's Dye Works, cushion covers dyed	6 75
A. James, cleaning cushions, etc.	21 25

89. *Women's Residences.*—Continued.

H. Mark, laundry	$11 46	
Parisian Laundry Co., laundry	669 37	
Singer Sewing Machine Co., hemstitching	12 15	
Petty items (3)	7 13	
Superintendent's Dept., material	86.90	
Pay Lists, wages of servants, maids, etc.	6,271 36	
Furnishings, dishes, cutlery, etc. ($767.88):		
T. Eaton Co., curtains, towelling, etc.	514 94	
Gowans-Kent Co., dishes	154 93	
Geo. Sparrow & Co., house furnishings	82 51	
W. J. Wilson, repairs to furniture	4 50	
W. Younger, chairs, etc.	11 00	
	$30,092 62	
Less sundry credits, occasional meals, etc.	347 46	
	29,745 16	
Superintendent, Miss L. I. Livingstone, 12 months to 30 June	1,550 00	
Housekeepers:		
Miss L. Panton, 3 months, 22 days, to 22 October at $87.50 per month	326 65	
Miss H. Panton, 8 months to 30 June	700 00	
		$32,321 81
(2) 92 and 94 St. George St.:		
(*a*) Maintenance of Building:		
Fuel ($252.00):		
W. H. Cox Coal Co., fuel	203 00	
Ridout & Bethune, teaming	49 00	
Light ($108.39):		
Consumers' Gas Co.	53 30	
Toronto Hydro-Electric Co.	55 09	
Water ($60.14):		
City Treasurer	60 14	
Alterations to plumbing, etc ($3,503.51):		
Routery Bros., lathing and plastering	167 93	
Superintendent's Dept., labour, $2,220.33; material, $1,115.25	3,335 58	
	$3,924 04	
(*b*) Housekeeping Account:		
Cleaning and House Service ($1,597.63):		
Canadian Cleaning Co., cleaning	10 68	
T. Eaton Co., sheeting, cleanser, etc.	67 26	
J. T. Hinchcliffe, waxing floors	17 90	
Industrial Refuge, laundry	200 93	
Toronto Window Cleaning Co.	11 25	
L. White & Sons, cleaning	5 00	
J. T. Wilson, laying linoleum	2 75	
University Press, printing	19 45	
Superintendent's Dept., labour, $1.70; material, $33.08	34 78	
Pay lists, wages of cleaners	1,227 63	
	5,521 67	
Less sundry credits, occasional meals, etc.	71 69	
		$5,449 98
(3) 100 Queen's Park:		
Fire-extinguishers ($60.00):		
Superintendent's Dept., material		60 00
		$37,831 79

91. *University College Women's Union.*

(*a*) Maintenance of Building:		
Fuel ($585.88):		
W. H. Cox Coal Co., fuel	$549 53	
Dunlop Coal Co., fuel	16 75	
Ridout & Bethune, teaming	19 60	
Gas and city current 7($587.10):		
Consumers' Gas Co.	587 10	
Water ($37.51):		
City Treasurer	37 51	
Repairs and renewals ($468.04):		
Superintendent's Dept., labour, $332.24; material, $135.80	468 04	
		$1,678 53
Provisions and housekeeping expenses ($12,728.16):		
P. Andrews, cake and pastry	147 46	
Armstrong & Spaffard, groceries	1,337 94	
Jas. Bamford, fruit, etc.	700 98	
J. Blood, groceries	199 85	
Belle Ewart Ice Co., ice	20 90	
Campbell Flour Mills Co., flour, etc.	130 14	
J. B. Ciceri & Co., fruit	74 33	
Club Coffee Co., coffee	282 79	
Geo. Coles Ltd., confectionery	33 32	
M. Doyle Fish Co., fish	70 30	
T. Eaton Co., cans, brooms, etc.	10 37	
E. B. Eddy Co., matches and serviettes	116 20	
Farmers' Dairy Co., milk and cream	1,638 94	
Glassco Ltd., jam	292 80	
Grand & Toy Ltd., stationery	10 35	
Gunns Ltd., butter, meat, etc.	1,674 92	
Harris Abattoir Co., meat	2,517 50	
H. J. Heinz Co., pickles, etc	54 42	
W. S. Johnston & Co., printing lunch tickets	23 46	
McWilliam & Everist Ltd., fruit	7 25	
Wm. Neilson Ltd., ice cream	315 88	
Patterson & Sons, provisions	861 67	
Miss M. E. Pew, eggs	30 00	
W. H. Proctor & Co., jam	47 90	
F. Simpson & Sons, groceries, etc.	51 26	
Students' Book Dept., books	11 00	
Telfer Bros., biscuits	14 48	
Tupman Thurlow Co., meat	22 00	
United Typewriter Co., repairing machine	2 30	
Warren Bros. & Co., groceries	576 40	
Harry Webb Co., bread	942 38	
Whyte Packing Co., provisions	346 01	
Miss M. C. Wrong, disbursements:		
Food supplies, $61.49; utensils, etc., $9.40; sundries, $9.03	79 92	
University Press, stationery and printing	19 05	
Superintendent's Dept., labour, $14.20; material, $49.49	$63 69	
Cleaning and House Service ($3,561.30):		
Consumers Gas Co., cleaning range	5 50	
Evening Telegram, advertising for help	4 74	
J. T. Hinchcliffe, waxing floors	7 60	
Industrial Refuge, laundry	353 16	
Reliable Cleaners, cleaning	10 00	
Toronto Window Cleaning Co., cleaning windows	32 15	
L. White & Sons, cleaning	15 00	
Superintendent's Dept., labour, $10.80; material, $136.02	146 82	
Pay lists, wages of servants, maids, etc.	2,986 33	
Magazines, piano, etc., ($51.32):		
MacDonald Subscription Agency, magazines	26 30	

91. *University College Women's Union.*—Continued.

Mail & Empire, subscription	$1 00	
Nordheimer Piano & Music Co., tuning	3 00	
W. H. Smith & Son, subscriptions	21 02	
Furnishings, dishes and sundries ($835.66):		
Canadian Wm. A. Rogers Ltd., spoons, etc.	71 87	
J. & J. Carson, sheets and pillow cases	20 23	
Cassidy's Ltd., tumblers	55 10	
T. Eaton Co., dishes, furnishings, etc.	400 24	
Gowans Kent & Co., tumblers	25 60	
Wm. Junor, dishes, etc.	57 60	
Martin Sales Agency, towel vending machine and towels	31 06	
G. H. Robinson, covers for chairs, etc.	54 13	
Singer Sewing Machine Co., machine	41 28	
John T. Wilson, linoleum	9 65	
Wrought Iron Range Co., food chopper, boiler, etc.	25 35	
Superintendent's Dept., labour, $21.05; material, $22.50	43 55	
	17,176 44	
Resident Head, Miss M. C. Wrong, 12 months to 30 June (paid also $940.00 in History)	1,700 00	
Housekeeper, Miss J. Barber, 12 months to 30 June	1,100 00	
Assistant Dietitian, Miss M. Millen, 1 month	65 00	
	20,041 44	
		$21,719 97
		$67,789 02

XI. (92) Royal Ontario Museum.

University's share of maintenance advanced to the Trustees of the Royal Ontario Museum under 2 Geo. V, Cap. 80	$34,905 64

XII. (93) Central Power Plant.

Fuel ($122,970.29):	
Britnell & Co., teaming	47 21
Canadian Pacific Railway, car rental	196 00
Century Coal Co., fuel	31,630 47
W. H. Cox Coal Co., fuel	46,337 65
Dunlop Coal Co., fuel	9,971 84
Geo. A. Matthews, repairs to coal-loading machine	55 50
Wm. McGill & Co., fuel	14,075 16
Milnes Coal Co., fuel	5,545 13
Ridout & Bethune, teaming	9,300 06
L. Joslyn Rogers, analysis of coal	40 50
Scott-Millar Coal Co., fuel	3,956 86
Superintendent's Dept., labour, $1,502.93; material, $310.98	1,813 91
City Electric Current ($3,667.35):	
Toronto & Niagara Power Co.	3,667 35
Water (291.80):	
City Treasurer	291 80
Repairs and renewals, engineer's supplies and miscellaneous items ($7,495.54):	
Canadian Fairbanks-Morse Co., repairs to scales	68 54
Jas. Crow Co., repairs	32 10
Goddard Bros., moving armature	103 25
Inspector of Weights and Measures, inspection	12 00
Mrs. Mary MacDonald, compassionate allowance as widow of employee	330 00
R. Robertson & Sons, work on boilers, etc.	855 75
Toronto Welding Co., welding mains	71 00
Turnbull Elevator Co., shortening cables	10 10

93. *Central Power Plant.*—Continued.

Universiey Press, printing	$14 50	
Petty items (6)	7 15	
Superintendent's Dept., labour, $2,413.20; material, $3,521.45	5,934 65	
Sundry advertisements, re fuel tenders, etc:		
Evening Telegram	12 40	
Mail and Empire	18 90	
The Globe	12 60	
Toronto Daily Star	12 60	
Special Alterations, pipe covering and soot blowers ($9,751.23):		
Diamond Specialty Co., blowers	2,529 57	
Superintendent's Dept., labour, $2,508.64; material, $4,713.02	7,221 66	
Engineers, assistant engineers, firemen and trimmers, ($13,861.46):		
Chief engineer, Chas Moseley, Jr. 12 months to 30 June	2,000 00	
Assistant engineers at $125.00 per month:		
L. McMaster, 12 months to 30 June, $1,500.00; overtime, 38 hours, $19.80	1,519 80	
J. H. Sandie, 12 months to 30 June, $1,500 00; overtime, 30 hours, $15.63	1,515 63	
Wm. Smith, 12 months, to 30 June, $1,500.00; overtime, 34 hours, $17.71	1,517 71	
Firemen at $100.00 to $110.00 per month:		
G. O'Connor, 9 months, 5 days, $1,008.34; overtime, 26 hours, $11.93	1,020 27	
M. Andrews, 8½ months, $935.00; overtime, 24 hours, $11.09	946 09	
R. H. Cameron, 6 months, 20 days, $728.95; overtime, 16 hours, $7.34	736 29	
B. Coles, 6 months, 18 days, $726.98; overtime, 18 hours, $9.26	736 24	
H. Elliott, 4 months, 29 days, $496.67; overtime, 6 hours, $2.50	499 17	
Wm. McDonald, 4 months	440.00	
J. Hand, 14 days	46 67	
A. Ford, 8 days	26 67	
Trimmers and helpers:		
Sundry labour at $90.00 to $100.00 per month	2,856 92	
	$158,037 67	
Less sundry credits	$160 11	
		$157,877 56

XIII. (94) Contingencies and Miscellaneous.

Hart House: Equipment for Gymnasium and Athletics ($7620.19):	
American Tent & Awning Co., awning	36 00
Bennett-Wright Co., fulcrums for diving board	93 50
Mrs. A. Brown, fencing jackets	24 00
G. H. Corsan, water wings	32 00
David Davis, piano cover	25 00
Dunlop Tire & Rubber Goods Co., matting	26 59
T. Eaton Co., clocks, etc.	39 00
A. J. Kerns Co., rowing machine	257 80
Rice Lewis & Son, boxing gloves	119 58
Nordheimer Piano Co., piano	400 00
Offie Specialty Mfg., Co., tables, desks and chairs	155 00
A. G. Spalding Bros., boxing gloves	186 25
T. W. Stafford, boxing gloves	30 00
A. T. Twycross, boxing platform	250 00
A. Weller & Co., target rings	18 80
H. A. Wilson Co., floor and wall apparatus	5,718 05
J. Wisdom & Co., boxing gloves	10 42

94. *Contingencies and Miscellaneous.*—Continued.

Superintendent's Dept., labour, $31. 38; material, $53.66; freight charges, $103.26		188 30	
Petty items (3)		$9 90	
Alumnæ Association Plans ($750.00):			
J. M. Lyle, in full for plans prepared		750 00	
Chester Massey Portrait ($1.060.00):			
F. Horsman Varley, fee for portrait ($1,500. less $500. paid in 1919-20)		1,000 00	
A. J. Boughton, frame		60 00	
Medals ($141.80):			
Ryrie Bros.	164 30		
Less received from donors	22 50	141 80	
President's House, 69 St. George St., ($758.75):			
Repairs, etc. ($421.25):			
Pedlar People Ltd., garage		233 58	
Superintendent's Dept., labour, $144.09; material, $43.58		187 67	
Fuel ($337.50):			
Connell Anthracite Mining Co.		337 50	
Association of Urban Universties, dues		11 39	
Canadian Bank of Commerce, Stationery Dept., title cards		9 00	
Dunlop's, flowers for funerals of late Prof. Toews, Dr. Ellis, and Senator Dale		90 00	
S. A. Frost, flowers for funeral of caretakers wife (Mrs. Clark)		15 00	
Dr. H. M. Harrison, medical attendance to S. Fowler, injured on duty		10 00	
Rous & Mann, printing programmes for Keats Centenary		36 72	
W. S. Johnston & Co., printing tickets for Keats Centenary		7 65	
S. S. Smith, commission on sale of lands, Port Hope		38 75	
Society for the Promotion of engineering Education, subscription		12 57	
Miss E. E. Shaw, engrossing resolution to Dean C. K. Clarke		25 00	
Miss I. M. D. Sutherland, illuminating address to Mr. Chester Massey		250 00	
Sir Edmund Walker, Chairman's disbursements for postage etc.		4 68	
National Trust Co., sundry valuations		158 00	
Taxes ($291.35):			
City Treasurer, adjustments for 1921 on the following properties:			
100 Queen's Park		180 52	
1 Queen's Park		47 57	
2 Surrey Place		15 54	
71 St. George St.		20 45	
92 St. George St.		15 07	
94 St. George St.		12 20	
Sundry persons, occasional attendance		14 00	
Small accounts (4)		7 62	
			$11,312.47

XIV. (95) Capital Account Charges.

Accountant, Supreme Court of Ontario, twelfth annual payment on debenture issue of 1909	25,260 00
Accountant, Supreme Court of Ontario, sixth annual payment on debenture issue of 1915 re-Hart House	5,975 00
Toronto General Hospital, tenth annual payment on debenture issus of 1911, re Pathological Building	6,568 00
Toronto General Hospital, tenth annual payment on debenture issue of 1911, re grant to Toronto General Hospital	15,157 00
Wardrop Estate, sixth instalment on purchase of house, No. 8 Queen's Park	750 00
Shoenberger Estate, fifth instalment on purchase of house, No. 184 College St.	500 00

95. *Capital Accounts Charges.*—Continued.

Campbell Estate, third instalment on purchase of house, No. 100 Queen's Park	$720 00	
Purchase of Beatty leasehold, City Treasurer, taxes, 1921	468 67	
Repayment to Endowment on account of advance for construction of Central Power Plant (written off Asset valuation)	20,208 00	
		$75,606 67

XV. (96) Special Courses for Returned Soldiers.

R. E. L. Kittredge, for instruction given in 1918-19	$375 00

XVI. (97) Special Research.

Applied Science.

Chemical Engineering ($3,787.18):		
Research Assistants:		
R. C. Cantelo, 1 October, to 30 June	1,800 00	
Geo. E. Gollop, 15 December, to 16 June	1,100.00	
C. S. Adams, 2 months (paid also in Department)	400 00	
H. C. Soehner, 2 months (paid also in Department)	300 00	
Expenses ($187.18):		
Canadian Laboratory Supplies, chemicals	145 00	
Central Scientific Co., tubes	24 40	
National Electro Products Ltd., hydrogen	14 34	
Ontario Rubber Co., tubing	3 44	
Civil Engineering ($3,079.08):		
Research Assistants:		
A. R. Duff, 15 December, to 30 June	1,300 00	
W. L. Sagar, 1 January to 30 June (paid also in Department)	600 00	
W. B. Dunbar, 2 months (paid also in Drawing)	350 00	
C. A. Hughes, 1 month (paid also in Department)	100 00	
Expenses ($729.08):		
Aikenhead Hardware Ltd., hardware	22 17	
Allen Bros., sand	21 00	
Art Metropole, paper	7 92	
Britnell & Co., cement	24 28	
John Brown, labour, 125 hours at 40 c.	50 00	
City of Toronto, Dept. of Works, limestone	16 80	
A. R. Duff, petty disbursements	12 71	
Grand & Toy, paper	1 70	
Wm. & J. G. Greey, castings	28 81	
C. C. Hommon, photo	5 64	
C. A. Hughes, petty disbursements	11 67	
McGregor & McIntyre, steel	7 14	
Photography, Dept. of, slides	9 67	
O. H. Pierce, calculating machine	400 00	
R. Robertson & Sons, stone, etc.	79 28	
W. S. Tyler, screen	15 75	
Superintendent's Dept., labour, $19.70; material, $29.34	49 04	
	763 58	
Less balance of 1919-20 advance—returned by Professor Gillespie	34 50	
	729 08	
Electrical Engineering ($5,715.53):		
Research Assistants:		
C. K. Duff, 1 July, to 30 April	1,500 00	
C. R. Hill, 1 October to 30 June	1,125 00	
W. C. C. Duncan, 1 July to 21 September at $100 per month, $270.00; 1-30 June, $110.00	$380 00	

97. *Special Research.*—Continued.

G. F. Tracy, 2 months	$220 00
Mechanician, J. W. Lawson, 12 months to 30 June (paid also in Department)	800 00
Expenses ($1,690.53):	
British Aluminum Co., aluminum	3 26
Canadian General Electric Co., lamps	5 29
Canadian Kodak Co., films	7 58
Canada Metal Co., lead pipe	1 13
Canadian National Carbon Co., batteries	54 82
H. S. Clark, valve	8 00
A. & F. Fisher, copper wire	6 12
General Radio Co., apparatus	557 04
Geo. Green Welding Co., welding tubes	7 00
Instruments Ltd., galvanometer	120 00
Wm. L. Laurie, valve	6 00
Northern Electric Co., apparatus	83 50
Photoraphy, Dept. of, slides	26 21
Chas Potter, charts	2 75
Prof. H. W. Price, petty disbursements	12 81
Students' Book Dept., books	22 80
Vimy Supply Co., transformer	7 50
Weston Electrical Instrument Co., apparatus	695 72
Superintendent's Dept., freight, etc., $30.44; labour, $7.08; material, $25.48	63 00
Engineering Physics ($971.51):	
Canadian General Electric Co., search-light	267 96
Consolidated Optical Co., lens	61 80
Edison Swan Electric Co., lamps	46 74
Adam Hilger Ltd., micrometer	552 26
Superintendent's Dept., cable,$3.51; freight, etc. $22.84; labour, $12.55; material, $3.85	42 75
Mechanical Engineering ($3,045.77):	
Research Assistants:	
J. H. Parkin, 1 July to 30 September (paid also in Department)	500 00
H. C. Crane, 3½ months at $100	350 00
E. V. Ahara, 2 months	200 00
J. S. MacAllister, 2 months	200 00
L. Galbraith, 2 weeke	50 00
Expenses ($1,745.77):	
Aikenhead Hardware, hardware	24 07
Prof. R. W. Angus, purchase of sundry supplies	29 53
Art Metropole, tracings	5 58
Atlas Engineering & Machine Co. Ltd.,graduating plates	3 75
Brigden's Ltd., prints and diagrams	152.95
F. G. Ericson, turnbuckles	4 90
S. L. Galbraith, drafting	23 20
F. Hickey, machine work, 177 hours at 85c (paid also in Department)	150 45
Macey Office Equipment Co., stools	22 00
Photography, Dept. of,slides	27 28
H. V. Short Hardware Co., micrometers, etc.	143 80
S. K. F. Industries, freight	1 39
Standard Pattern Works, aerofoil models	247 45
Students' Book Dept., subscriptions	34 75
C. H. Taylor, meters, etc.	538 89
University Press, stationery	9 80
Superintendent's Dept. freight, $2 94; labour, $209 38; material, $113 66	325 98
Mining Engineering ($820.01):	
Research Assistant, B. F. Hannan, 2 months	250 00

97. *Special Research* .—Continued.

Expenses ($570.01):		
Albany Pump Co., machinery	154 02	
Baines & David, steel	4 49	
Geo. C. Cooper, grinding	11 50	
Dewey & Almy Chemical Co., lime	4 81	
Driver-Rarris Co., nicrome ribbon	5 74	
F. C. Dyer, petty disbursements	12 08	
Gregory Electric Co., motor	35 66	
F. Hickey, pole-pieces	56 45	
Lever Bros., oxygen	4 08	
G. E. Leworthy, glass blowing	4 65	
W. R. McKee, apparatus	51 25	
Jas. Morrison Brass Mfg. Co., gauge	4 14	
Norton C., tubes, etc.	24 78	
Ontario Rubber Co., tubing	7 29	
J. G. Ramsey & Co., films, etc.	29 57	
Geo. A. Ready, apparatus	3 50	
Robt. Simpson Co. Ltd., motor	14 90	
Singer Sewing Machine Co., machine parts	3 29	
Tallman Brass & Metal Ltd., discs	28 31	
Van der Linde Rubber Co., rubber rings	31 18	
Petty items (2)	2 45	
Superintendent's Dept., freight, $2.05; labour, $31.78; material, $42.04	75 87	
General Expenses ($1,990.00):		
University Press, Bulletin No. 2	1,990 00	
		$19,409 08

Medicine.

W. Cowan, laboratory attendant, 9 months at $75.00; 3 months at $83.33	925 00	
Miss Violet A. Gillett, artist's services	125 00	
Apparatus and supplies ($1,732.43):		
Allen Mfg. Co., laundry	6 48	
Edward Bind, drawings	142 50	
J. F. Hartz Co., syringes	20 58	
Hudson-Parker, towels,etc.	16 52	
Ingram & Bell, chemicals and sugical instruments	202 15	
Masco Co. Ltd., hair dryer	25 00	
Geo. B. Meadows Ltd., cages	1,085 62	
Photography, Dept. of, slides	17 85	
Physiology, Dept. of, making calorimeters	15 00	
Dr. D. E. Robertson, disbursements: Laboratory supplies, etc., $35.65; balance from 1919-20, $7.86	43 51	
F. L. Robinson, making calorimeters	15 00	
Rubber Products Co., calorimeters	34 14	
N. B. Taylor, travelling expenses (Akron)	71 10	
Superintendent's Dept., labour, $35.10; material, $1.88	36 98	
Animals and keep, ($358.00):		
A. O. Bennett, animals	8 25	
R. Johnston, animals	44 00	
John O'Donnell, dogs, $18.00; care of dogs, $193.60	211 60	
Dr. D. E. Robertson, animals purchased	94 15	
Pathological Chemistry:		
O. H. Gaebler, Research Assistant, 1 month (paid also in Department)	200 00	
Psychiatry:		
Research Assistants:		
Miss M. Rathbun, 2 months, 18 days, at $65.00 per month	169 00	
Miss B. M. McCreary, 2 months, 17 days, at $65.00 per month	166 85	
W. E. Blatz, 1 month	85 00	

97. *Special Research.*—Continued.

Expenses ($74.35):		
A. E. Docherty & Co., adding machine	$20 12	
.. Hardware Co., of Toronto, rule	2 00	
C. H. Stoelting Co., tuning fork	52 23	
		$3,835 63

Anatomy.

Dr. Herbert G. Wilson, Research Assistant	250 00	
Expenses ($442.45):		
Dodge Mfg. Co., steel roller	12 18	
Grand & Toy Ltd., guides	1 25	
Hynson, Westcott & Dunning, colours	17 36	
Ingram & Bell, chemicals	52 37	
Prof. J. P. McMurrich, petty disbursements	20 94	
Sanderson, Pearcy & Co., shellac	16 83	
Photography, Dept,. of, slides	13 85	
Spencer Lens Co., apparatus	94 67	
Williams & Wilkins, subscription	3 75	
University Press, printing	4 15	
Superintendent's Dept., labour, $100.93; material, $104.17	205 10	
		$692 45

Astronomy.

John A. Brashear Co., camera lens	300 00	
		$300 00

Bio-Chemistry.

G. H. Berkeley, Research Assistant, 1 month (paid also in Research, Botany)	100 00	
Expenses ($870.60):		
Ansco Co., cotton	2 62	
Barnett's Antiques, kettle	15 00	
Canadian Laboratory Supplies, chemicals, etc.	186 26	
Central Scientific Co., Apparatus	73 31	
Eastman Kodak Co., chemicals	50 46	
T. Eaton Co. Ltd., carbonate of soda	4 00	
Eimer & Amend, apparatus	49 75	
General Chemical Works, chemicals	46 54	
Emil Greiner Co., apparatus	151 18	
International Equipment Co., freight	3 92	
Lamotte Chemical Products, chemicals	50 58	
Lyman Bros. & Co., chemicals	2 80	
McKay School Equipment Ltd., apparatus, etc.	68 15	
Merck & Co., chemicals	21 89	
Musher & Co., flour	2 92	
National Drug & Chemical Co., chemicals	5 43	
Palo Co., apparatus	72 61	
Wm. Rennie Co., seeds	2 70	
Will Corporation, tubes	17 38	
Superintendent's Dept., labour	43 10	
		$970 60

Biology.

Assistant Professor, W. A. Clemens, (share of salary charged to Research—see Faculty of Arts)	2,000 00	
Technicians:		
Miss M. Maitland, 181 hours at 65c.	117 65	
N. B. Laughton, 66 hours at 65c.	42 90	
Miss E. Logier, 33 hours at 75c.	24 75	
J. E. Bates, 30 hours at 75c.	22 50	
W. B. Ririe, 3 hours at $1.00	3 00	

97. *Special Research.*—Continued.

Expenses ($3,899.79):		
H. A. Ball, pails	$4 04	
C. Melvin Bartlett, nets	7 20	
Beaver Brass Mfg. Co., brass buckets, etc.	36 35	
W. R. Brock Co., cotton	6 79	
Buffalo Apparatus Corporation, chemicals	58 52	
Canadian Laboratory Supplies, apparatus	153 01	
Canadian Numbering Machine Co., machine	18 40	
M. E. Carson, specimens	16 22	
City of Toronto, Parks Dept., monkey	20 00	
Prof. W. A. Clemens, Fisheries Research in Lake Nipigon: Travelling expenses, $207.65; board for assistants, $193.30; express on equipment, $126.01; boat hire, $101.10; labour, $67.50; supplies, $54.44	750 00	
F. Conley, cartage	4 50	
Dennison Mfg. Co., tags	12 07	
Eastman Kodak Co., alcohol	18 53	
T. Eaton Co. Ltd., hardware, etc	65 55	
Freyseng Cork Co., corks	19 18	
General Biological Supply House, chemicals	28 39	
Geological & Natural History Survey, apparatus	57 83	
Wm. & J. G. Greey, cloth	39 18	
J. Hallam, compass	4 28	
J. F. Hartz Co., apparatus	120 92	
Geo. M. Hendry Co., stoppers	6 45	
A. Hoover & Son, fish	12 00	
Hughes-Owens Co., instruments	4 12	
Dr. Martin Knudsen, thermometer frame	11 14	
Kny-Scheerer Corporation, forceps	11 00	
John Leckie Ltd., nets and ropes	420 36	
Lyman Bros. & Co., chemicals	101 17	
Geo. B. Meadows, cages	470 28	
National Drug & Chemical Co., chemicals	34 67	
Negretti & Zambra, thermometers	40 85	
Office Specialty Mfg. Co., cases	5 97	
Ontario Cork Co., corks	3 18	
Ontario Rubber Co., tubing	10 65	
W. H. Piersol, petty disbursements	3 15	
J. G. Ramsey & Co., plates	22 90	
Rice, Lewis & Son, hardware	3 13	
Richards Glass Co., vials	34 30	
Scientific Materials Co., chemicals	13 15	
Robt. Simpson Co., locks, etc.	10 75	
Spencer Lens Co., apparatus	26 30	
Stanyon Sales Co., vials	23 34	
Toronto Dog & Cat Hospital, animals	53 40	
Toronto Produce Co., fodder	5 85	
Prof. E. M. Walker, expenses detailed under Special Research, Botany	100 00	
Whitall-Tatum Co., chemicals	87 62	
Will Corporation, apparatus	410 80	
University Press, stationery	10 50	
Petty items (6)	11 87	
Superintendent's Dept., freight, $34.76; labour, $268.13; material, $207.04	509 93	
		$6,110 59

Botany.

Assistant Professor, H. B. Sifton, 12 months to 30 June	2,500 00	
Research Assistants:		
A. R. Walker, 4 months at $100 (Paid also in Department)	400 00	
Miss Clara W. Fritz, 1 month ot $100; 5 months at $50.00	350 00	
G. H. Berkeley, 1 month ,paid also in Research, Bio-Chemistry)	100 00	

97. *Special Research.*—Continued.

Clerical Assistants:			
P. A. Matthews, 10 weeks at $25.00		$250 00	
Miss Roberta Dinsmore, 3 weeks at $20.00		60 00	
Miss M. Winterbottom, 1 week		25 00	
Expenses ($3,303.08):			
Art Metropole, microscopes, etc.		625 64	
I. L. Conners, petty disbursements		5 71	
Miss Evelyn Criddle, seeds		39 00	
Julien P. Friez & Sons, paper		6 38	
Ingram & Bell, apparatus		395 81	
Kny-Scheerer Corporation, illuminator		61 12	
Lake Simcoe Ice Supply Co., ice		18 00	
McKay School Equipment Ltd., apparatus		33 96	
Pringle & Booth, photos		16 20	
J. G. Ramsey & Co., plates		85 52	
Mrs. J. E. Ridgway, colour standards		11 21	
Spencer Lens Co., microscopes, etc.		1,055 45	
St. Mary's College, plant illustrations		40 58	
Prof. R. B. Thompson, expenditures re Joint Expedition, 1921, with Prof. E. M. Walker:			
Travelling expenses, $359.19; gasoline and car accessories, $159.99; hotel expenses, $72.08; supplies, $52.69; provisions, $23.86; sundries, $36.81	$704 62		
Share charged to Special Research, Biology, $100; charged to 1921-22, $104.62	204 62	500 00	
Topley Co., apparatus		245 16	
Toronto Hydro-Electric System, heaters		15 80	
Will Corporation, laboratory supplies		117 49	
Superintendent's Dept., freight, $2.95; labour, $1.61; material, $25.49		30 05	
			$6,988 08

Chemistry.

Associate Professor, John B. Ferguson, 12 months to 30 June		3,800 00	
Research Assistant, Electro-Chemistry, J. Kelleher, 1 October to 31 May (paid also in Department)		500 00	
Expenses ($683.26):			
Canada Flint Glass Co., apparatus		9 60	
Canadian Laboratory Supplies, incubator, etc.		155 65	
Dental Co. of Canada, blowpipe		5 24	
L'Air Liquide Society, oxygen		19 77	
Leeds & Northrup Co., galvanometer, etc		21 48	
W. R. McKee, apparatus		55 00	
Port Hope Sanitary Mfg., Co. Ltd., sink		16 67	
Rogers Electric Co., relays		12 12	
Spencer Lens Co., apparatus		308 40	
Thermal Syndicate Ltd., tube		2 83	
H. C. Tugwell & Co. Ltd., plates		14 18	
Volta Mfg. Co., apparatus		8 73	
Hiram Walker & Sons Metal Products Ltd., wire		30 70	
Superintendent's Dept., freight, $7.05; labour, $12.24; material, $3.60		22 89	
			$4,983 26

Geology.

Prof. A. P. Coleman, disbursements re Summer Expedition, 1920:			
Travelling expenses, $525.05; hotel expenses $251.25; supplies,, $49.50; sundries, $33.90	$859 70		
Less charged to 1919-20 appropriation	800 00	59 70	
Photography, Dept. of, prints		16 73	
			$76 43

97. *Special Research.*—Continued.

Mineralogy.

Research Assistant, E. W. Todd, 1 October to 30 April (paid also in Dept. of Chemistry)	$1,750 00	
Expenses ($1,656.76):		
Bausch & Lamb Optical Co., microscope, etc	346 62	
Eastman Kodak Co., chemicals	20 03	
T. Eaton Co., Ltd., pump, etc	10 90	
Robert Elder Carriage Warks, body for car	36 05	
A. D. Gorrie & Co., Ford Car and accessories	816 03	
Ingram & Bell, bottles	17 22	
Kent's Ltd., prism	8 00	
Lyman Bros. & C. Ltd., chemicals	41 04	
Office Specialty Mfg. Co., sections	65 69	
D. Pike Co., tent, bags, etc.	73 74	
J. G. Ramsey & Co., filters and plates	28 23	
Ritchey Supply Co., powder	2 99	
Prof. T. L. Walker, disbursements re field work: Hotel expenses, $53.85; car accessories, $26.37; supplies and sundries, $19.78	100 00	
G. Ross Workman, drafting	25 00	
University Press, stationery	3 95	
Petty items (2)	3 51	
Superintendent's Dept., freight, $18.53; labour, $27.68; material, $11.55	57 76	
		$3,406 76

Palaeontology.

Research Assistant, W. S. Dyer, 12 months to 30 June	1,000 00	
Prof. W. A. Parks, expenditure re Red Deer River Expdition: Travelling expenses, $731.55; equipment, $334.90; wages, $268.00; provisions, $253.09; supplies, $196.69; hotel, $145.50; team, $52.25; freight and sundries, $17.73; balance returned in 1921-22, 29c.	2,000 00	
		3,000 00

Physics.

Research Assistants:		
P. A. Petrie, 3 months at $100.00, $300.00; 1 month, (half-time) $50.00; 3 weeks at $125.00 per month, $84.00	434 00	
G. M. Shrum, 2 months	300 00	
H. J. Franklin, 27 April to 30 June (paid also in Drawing)	288 00	
F. W. Kemp, 3 months, 19 days, at $50.00 a month (paid also in Department)	181 67	
Miss F. M. Quinlan, 150 hours at $1.00 (paid also in Department)	150 00	
P. Lowe, 1 month (paid also in Department)	125 00	
V. P. Lubovitch, 1 month (paid also in Department)	125 00	
Expenses ($5,120.12):		
Aikenhead Hardware Ltd., hardware	64 32	
Baines & David, steel bar	3 19	
Beardmore Belting Co., belting	11 22	
Booth-Coulter Copper & Brass Co., brass	27 30	
British Oxygen Co., apparatus ($1,609.62 of which $709.62 charged to Department)	900 00	
Brown's Copper & Brass Rolling Mills, rods	54 30	
Buehler & Co., screens, etc.	55 20	
Canadian Carbonate Co., liquid gas	5 00	
Canadian Johns-Manville Co., fibre, etc.	10 85	
Canada Metal Co., sheet lead, etc	127 90	
Canadian Seamless Wire Co., wire	7 33	
Corning Glass Works, tubing	68 96	
Eastman Kodak Co., films, etc.	37 50	

97. *Special Research.*—Continued.

Edison Swan Electric Co., bulbs	$67 42	
Eimer & Amend, chemicals and apparatus	166 02	
Foote Mineral Co., chemicals	3 38	
Gas Processes Ltd., hydrogen	3 58	
Grand Trunk Railway System, labour and material on steel cylinders	46 44	
Hammer Radium Co., sulphide	39 11	
J. F. Hartz Co., chemicals	106 44	
Adam Hilger Ltd., apparatus	623 22	
Imperial Oil Ltd., oil	6 44	
Ingram & Bell, films, etc.	14 45	
International General Electric Co., X-Ray tube	143 82	
Kimble Glass Co., tubes	37 72	
L'Air Liquide Society, oxygen, etc.	57 98	
Lancashire Dynamo & Motor Co., motor	126 25	
Lyman Bros. & Co., chemicals, etc	303 09	
E. F. McKee, motor	54 00	
Jas. Morrison Brass Mfg. Co., piping, etc	88 68	
Ogilvy & Co., scale	6 69	
Ontario Rubber Co., tubing	18 14	
Perkins Electric Co., lamps	27 27	
H. W. Petrie, pulleys	12 38	
J. G. Ramsey & Co., plates	49 47	
T. G. Rice Wire Mfg. Co., screening	12 24	
Thermal Syndicate Ltd., tubes and tubing	160 98	
Toronto Hydro-Electric System, installing liquid air plant	1,185 42	
Ward's Natural Science Establishment, specimens	10 89	
S. S. White Co., cylinders	29 07	
A. R. Williams Machinery Co., pulleys	8 33	
J. Wicksey, attendance at meetings	42 00	
Carl Zeiss, lens	47 68	
University Press, stationery	37 20	
Petty items (4)	5 07	
Superintendent's Dept., labour, $107.51; material, $150.60	258 11	
	5,172 05	
Less refund from Nicholls Chemical Co.,	51 93	
	5,120 12	
		$6,723 79

Physiology.

Research Assistants:		
Edward Fidlar, 12 months to 30 June	1,000 00	
Dr. N. B. Taylor (paid also in Department)	500 00	
C. H. Best, 8 months (part-time) at $25.00, $200.00; 1 month, $85.00 (paid also in Department	285 00	
L. G. Kilborn, 2 months at $100.00, $200.00; 1 month, $85 00	285 00	
E. C. Noble, 8 months (part-time) at $25.00, $200.00; 1 month, $85.00 (paid also in Department)	285 00	
N. S. Clark, 1 month (paid also in Bio-Chemistry)	85 00	
R. W. I. Urquhart, 1 month (paid also in Bio-Chemistry)	85 00	
H. G. Cameron, 1 month	75 00	
Expenses ($974.09):		
Aikenead Hardware Ltd., hardware	19 12	
Anglers Co., frogs	63 65	
Baird & Tatlock (London) Ltd., balances, etc	238 05	
Chas. Bouchet et Cie, subscription	10 12	
Canadian General Electric Co., motor	36 81	
Canadian Laboratory Supplies Co., weights, etc	63 49	
Central Scientific Co., chemicals	9 63	
Connaught Antitoxin Laboratories, animals	30 00	
Ingram & Bell, instruments, etc.	47 51	

97. *Special Research.*—Continued.

L'Air Liquide Society, nitrogen	$3 06	
The Lancet, subscription	2 92	
Lyman Bros. & Co., chemicals	139 00	
McKay School Equipment Ltd., brushes	4 40	
Mallinckrodt Cemical Works, chemicals	5 49	
Neill & Co., reprints	11 40	
John O'Donnell, animals	3 00	
A. H. Thomas Co., apparatus	46 81	
Toronto Dog & Cat Hospital, animals	105 50	
Toronto Produce Co., fodder	33 92	
Will Corporation, tubing, etc	68 02	
Williams & Wilkins, subscription	6 23	
Petty items (4)	6 43	
Superintendent's Dept., material	19 53	
		$3,574 09

Psychology.

Expenses ($143.14):		
E. L. Thorndike, examination sets	139 24	
Superintendent's Dept., freight	3 90	
		143 14

Zymology.

H. B. Speakman, Director, 12 months to 30 June	4,000 00	
A. M. Wynne, Research Assistant, 12 months to 30 June (paid also in Bio-Chemistry)	1,200 00	
Arthur Clarke, Laboratory Attendant, 12 months to 30 June	480 00	
Expenses ($1,672.86):		
American Chemical Society, subscriptions	20 07	
Canadian Laboratory Supplies, glassware and chemicals	246 16	
Central Scientific Co., regulator	15 16	
Chisholm Milling Co., corn	1 60	
Consumers' Gas Co., plates, etc	19 75	
T. Eaton Co., repairs to microscopes, etc.	45 00	
Eimer & Amend, weights, etc.	229 01	
Grand & Toy Ltd., desk and fyles	155 95	
J. F. Hartz Co., instruments, chemicals, etc.	1,072 10	
Henderson Electric Co., repairs to stove	5 00	
Geo. M. Hendry Co., blackboard	9 80	
Leeds & Northrup Co., galvanometer	5 31	
McKay School Equipment Ltd., chemicals, glassware, etc.	132 95	
O'Keefe Brewery Co., mineral water	16 67	
Richards Glass Co., distillation apparatus, etc	73 17	
Rockefeller Institute for Medical Research, subscriptions	25 03	
Prof. H. B. Speakman, disbursements:		
Laboratory supplies and sundries, $43.04; stationery and postage, $6.96	50 00	
United Typewriter Co., inspection	3 00	
Williams & Wilkins, subscription	4 55	
Yorkville Laundry	4 09	
University Press, binding, etc.	74 05	
Superintendent's Dept., freight	4 44	
	2,212 86	
Less credit per Professor Speakman	540 00	
	1,672 86	
Alterations in Laboratory ($3,846.01):		
Superintendent's Dept., labour, $2,540.70; material, $1,305.31	3,846 01	
		$11,198 87
		$71,412 77

APPENDIX IV.

University Press.

Transactions for year ending 30th June, 1921.

Receipts (ordinary) including $13,719.77, outstanding and receivable on 30th June, 1921			$104,182 26
Rentals, Students' Book Department			900 00
			$105,082 26
Expenditures (ordinary) detailed below		$96,398 32	
Moving expenses		2,247 60	
Interest on capital expenditure for Press Building		1,688 24	
		$100,334 16	
Transferred to Publications Account		2,118 54	
		$98,215 62	
Value of supplies bought in advance and on hand 30th June, 1921	$3,372 72		
And work in progress	3,123 10		
	$6,495 82		
Less Liabilties	4,334 00	2,161 82	96,053 80
			$9,028 46
Purchases in advance (net)			2,161 82
			$6,866 64
Amount of Surplus account on 30th June, 1920		$16,272 29	
Added thereto, balance from operating account, 30 June, 1921, as above		6,866 64	
		$23,138 93	
Less expenditure on additions to type and equipment during 1920-21		2,516 12	
Transferred to University Press Building Capital Account			$20,622 81
Publications Account:			
Amount outstanding 30 June, 1920		$511 44	
Expenditures		2,410 24	
		$2,921 68	
Receipts from sales		1,629 33	
Amount outstanding 30 June, 1921			$1,292 35

Details of Expenditure, Operating Account.

R. J. Hamilton, Manager, 12 months to 30 June, $2,250; allowance for clerical assistance, $200	2,450 00	
Pay lists, wages of employees	45,991 98	
		$48,441 98
Supplies and General Maintenance ($47,956.34):		
Alexander & Cable, lithographing	122 40	
Allen Paper Co., paper	1,806 36	
H. Andrews, binding	18 00	
Anstey & Bromley, binding and ruling	708 31	
Art Metropole, supplies	44 83	
Ault & Wiborg, ink	118 09	
D. A. Balfour, ribbons	109 54	
Barber-Ellis Ltd., paper	2,215 52	
Wm. Bartlett & Son, shades	165 39	

University Press.—Continued.

Beardmore Belting Co., yeather	$18 84
Brigdens Ltd., cuts	806 83
W. R. Brock Co., linen	47 97
Brown Bros., paper and supplies	3,013 54
Buntin-Reid Co., paper	2,378 67
The Bursar, postage supplied	123 00
Chas. Bush Ltd., ink	576 89
B. Cairns, engraving	14 12
Canada Metal Co., metal	297 69
Canada Paper Co., paper	782 58
Canada Printing Ink Co., ink	20 51
Cannon Canadian Co., paste	10 61
E. Carroll, grinding knives	11 07
College Press, paper	113 89
Copeland, Chatterson Ltd., index sheets	21 52
Copp, Clark Co., examination books	142 30
Dominion Envelope & Carton Co., envelopes	396 63
John Elliott, embossing	12 00
Geo. Everall Co., printing	60 20
Factory supplies Co., wipers	10 00
W. J. Gage & Co., envelopes and supplies	376 48
Gill Bros. ruling	156 08
Grand & Toy, stationery	185 61
R. J. Hamilton, disbursements: Cleaning, etc., $240.33; postage and car fares, $40.90; express and cartage, $14.85; laundry, $9.51; supplies and sundries, $115.94	421 53
Fred W. Hales Paper Co., paper	40 64
Henderson Bros., binding	580 97
Geo. M. Hendry Co., ink-wells, etc.	19 00
Imperial Oil Ltd., oil	52 03
J. R. Irving, sewing	119 52
Lanston Monotype Machine Co., repairs	1,091 10
Legg Bros. Ltd., cuts	5 62
H. J. Logan, wire	5 60
Lowe-Martin Co., cards	36 78
Luckett Loose Leaf Co., paper	8 55
Macey Office Equipment, indices	7 70
Manton Bros., ink	5 47
Maynard & Ingles, cartage	116 15
Miller & Richards, printing	15 86
Mitchell & McGill, office equipment	5 50
J. Muir & Son, leather	96 78
A. Muirfead Co., gold leaf	34 99
Murray-Kay Co., cark matting	182 65
Thos. McDonnell, binding	36 61
McFarlane Son & Hodgson, paper	37 99
R. G. McLean, printing	20 15
National Paper Goods Co., paper	227 18
National Stationers, carbon paper	12 70
National Typewriter Co., paper and ribbons	201 75
Office Specialty Mfg. Co. folders, etc.	13 58
Paper Sales Co., paper	289 96
Patterson & Heward, brass stamps	8 68
Photo Engravers Ltd., engraving	77 07
Poole & Co., repairs to press	19 60
Provincial Paper Mills, paper	16,126 71
E. Pullan, waste	99 91
Rapid Electrotype Co., electrotyping	442 66
Rapid Typesetting Co.,typesetting	2,298 21
Ed. & Jas. Richardson, leather	151 23
Ryerson Press, electrotyping	275 72
A. G. Sherman, cartage	87 85

University Press.—Continued.

Silks Ltd., ribbon	$34 38	
W. H. Smith & Son, binding	14 07	
Southam Press, printing	34 91	
H. H. Sparks, ruling	27 60	
Standard Embossing Co., embossing	319 31	
Stephenson, Blake & Co., wire	56 15	
Students' Book Dept. supplies	231 41	
Telfer Mfg. Co., cardboard	21 21	
F. T. Thomas & Co., ruling	7 58	
Thomas & Martin, binding	510 83	
Toronto Delivery & Cartage Co., cartage	15 65	
Toronto Type Foundry, type	8 10	
Toronto Typothetae, services recosts system	336 00	
United Paper Mills, paper	2,206 46	
United Typewriter Co., stationery	158 64	
University of Toronto Alumni Association, addressing envelopes	24 50	
Weatherhead Paper Co., paper	231 83	
A. White Paper Co., paper	771 23	
Wickett & Smith, gold leaf	13 13	
Wilson-Munroe Co., paper	910 08	
Items under $5.00 (11)	22 44	
Freight charges, etc.	66 07	
Superintendent's Dept., labour, $680.64; material $303.99	984 63	
Heat, light and power:		
Heat, $1,525.71; electric current, $289.80; gas, $269.62	2,085 13	
City Treasurer, water	21 78	
City Treasurer, elevator license	5 00	
North British Mercantile Insurance Co., insurance on building and contents	503 75	
Advertising Announcements:		
Canadian Forum	35 00	
The School	48 00	
Torontonensis	25 00	
University of Toronto Monthly	45 00	
University of Toronto Y.M.C.A.	22 00	
Wycliffe Magazine	10 00	
Moving expenses ($2,247.60):		
Dodge Mfg. Co., pulleys	13 06	
Goddard Bros., machinery	304 40	
Geo. A. Matthews, rewinding armature	50 75	
Miller & Richard, machinery	180 51	
Toronto Type Foundry Co., moving machine	358 54	
Superintendent's Dept., labour, $758.38 material, $581.96	1,340 34	
		$98,645 92

Details of Expenditure, Plant Account.

Adams Furniture Co., chairs	44 40	
Canada Metal Co., metal	822 01	
Miller & Richards, ink	21 33	
Singer Sewing Machine Co., machine	180 55	
Toronto Type Foundry Co., press	1,447 83	
		$2,516 12

APPENDIX V.

Superintendent's Stores and Sundry Labour Account

Ledger balance, 30 June, 1920		$13,297 36
Purchases made during 1920-21:		
Adams Furniture Co., stools	78 75	
Advance Oil & Supply Co., oil, etc.	137 48	
Aikenhead Hardware Ltd., hardware	1,929 39	
Anatomical Dept., methylated spirits	6 65	
Art-Way Products Co., varnish	97 20	
J. Austin & Sons, lumber	47 98	
Autocall Co., signals	19 68	
Automatic Telephones & Time Recorders, Ltd., telephones	91 01	
Babcock & Wilcox, Ltd., piping	178 54	
Baines & David, electrical supplies	18 17	
Barrett Co., pitch	144 00	
Wm. Bartlett & Son, shades	59 30	
Batts, Ltd., lumber	574 26	
Beardmore Belting Co., belting	145 00	
A. C. Biggar, key blanks	18 88	
Bird & Son, roofing material	38 41	
Boeckh Bros., brushes	223 21	
Booth Coulter Copper & Brass Co., plumber's supplies	18 28	
British Aluminum Co., aluminum	9 76	
W. R. Brock Co., towels	74 85	
Brown's Copper & Brass Rolling Mills, copper	343 76	
Builder's Moulding Co., lime, cement, etc.	111 60	
Robt. Bury & Co., lumber	2,120 05	
W. Calder & Son, tools	5 75	
Canada Brokerage Co., soap	155 24	
Canada Hardware Co., hardware	2,504 24	
Canada Metal Co., bronze	33 62	
Canadian Asbestos Co., asbestos	56 56	
Canadian Blower & Forge Co., motor	567 12	
Canadian Fairbanks-Morse Co., steel cases	10 56	
Canadian Fish Co., belt hooks	17 19	
Canadian General Electric Co., electrical supplies, cable wire, plates, etc.	18,984 41	
Canadian Germicide Co., soap	85 82	
Canadian Ice Machine Co., lime, etc.	21 65	
Canadian Johns Manville Co., roofing blocks	3,496 90	
Canadian Laboratory Supplies, supplies	10 10	
Canadian Machinery Co., saw bits	430 14	
Canadian Powers Regulator Co., regulators, etc.	51 38	
Canadian S.K.F. Co., bearings	32 13	
John Catto & Son, towels, etc.	231 00	
Central Electric Supply Co., electrical supplies	536 43	
Central Ornamental Glass Co., clock dials	64 64	
Common Sense Mfg. Co., rat poison	8 48	
Consolidated Plate Glass Co., glass	616 50	
Cooke & Boulton, beeswax	97 06	
Crane, Ltd., piping	3,328 71	
Crescent Concrete Paving Co., cement	245 00	
Jas. Crow Co., repairs	7 00	
W. H. Cunningham, glue	63 57	
Crucible Steel Co., rods	6 46	
Davis Slate & Mfg. Co., slate	89 40	
Dean Bros. bronze plating	19 51	
Wm. S. Dean, locks	21 01	
Dearborn Chemical Co., chemicals	261 77	
Department of Soldiers' Civil Re-Establishment, gasoline	40 40	
Diamond Cleanser Mfg. Co., cleanser	25 01	
Dodge Mfg. pulleys, etc.	75 57	
Dominion Carbon Brush Co., brushes	19 68	

Superintendent's Stores and Sundry Labour Account.—Continued.

Dominion Radiator Co., plumbers' supplies	$1,546 71
C. A. Dunham Co., plumbers' supplies	1,756 70
Dunlop Tire & Rubber Goods Co., rubber hose	625 28
Eagle Lock Co., locks	947 05
T. Eaton Co., cloth, etc.	390 31
Eby-Blain, Ltd., soap	47 02
E. B. Eddy Co., matches	927 83
J.H. Edmunds Co., reflectors	17 68
Electric Insulations & Varnish Co., varnish	165 79
Ely Bros., charcoal	54 40
Factory Products, conduits electrical supplies, etc.	5,535 36
A. D. Fisher Mfg. Co., motor	277 75
Garlock Packing Co., packing	298 63
Good Mfg. Co., plumbers' supplies	165 39
Goodyear Tire & Rubber Co., hose	35 45
Gordon MacKay Co., towels	78 57
Gurney Foundry Co., grate box	15 76
T. H. Hancock, lumber	5,013 99
E. Hansard, caning chairs	5 50
Hardware Co. of Toronto, hardware	606 66
F. C. Henderson, glass	14 40
Geo. M. Hendry Co., beaver board, etc.	552 34
Henry Engineering Co., fuses	297 35
Hersey Mfg. Co., rubber disc	7 64
Interlake Tissue Mills, towels	1,683 78
Johnston Temperature Regulator Co., valves, etc.	47 10
A. M. Judd, lamps, etc.	7,000 97
Lagonda Mfg. Co., steel cutters, etc.	7 51
R. Laidlaw & Co., lumber	531 83
Lancashire Dynamo & Motor Co., motor	103 00
J. Leckie, lime	39 57
John Lindsay, cinch anchors	23 75
J. T. W. Low, chair pads	8 00
A. R. Lundy, fence	225 38
Lyman Bros, Co., chemicals	148 17
McClary Mfg. Co., pipe	338 99
McColl Bros. oil	780 51
N. Macdonald, paper	26 90
McDonald & Wilson, lighter	175 50
McFarlane Mfg. Co., ladders	130 36
McKay School Equipment Co., settees, etc.	2,728 48
W. R. McKee, electrical work	11 50
D. K. McLaren Ltd., belting	10 30
Martin Sales Agency, towel machine, etc.	67 63
Masco Co., lugs	35 52
Geo. A. Matthews, motors, etc.	523.93
Matthews Bros., moulding	25 33
Geo. B. Meadows Co., baskets, etc.	179 24
Medland Bros., cleanser	41 85
Merck & Co., chemicals	73 73
Monarch Brass Mfg. Co., topping machine	30 45
J. H. Morin & Co., glue, etc.	52 12
J. H. Morrison, cement	7 58
Jas. Morrison Brass Mfg. Co., piping, etc.	8,597 19
Mott Co., sinks, etc	100 71
A. Muirhead Co., paints	171 76
Murphy Iron Works, grate bars	1,296 00
Murray-Kay Co., cork carpet	425 32
North American Incinerator Co., trough	38 38
Northern Electric Co., electrical supplies	2.465 09
Ohio Varnish Co., varnish	17 03
Oil of Joy Mfg. Co., polish	18 18
Ontario Foundry Co., castings	204 27

Superintendent's Stores and Sundry Labour Account.—Continued.

Ontario Lime Co., piping	$631 76	
Ontario Rubber Co., rubber tips	12 76	
Ontario Soap & Oil Co., soap, etc.	569 40	
Otis-Fensom Elevator Co., elevator supplies	529 07	
Panels Ltd., panels	62 31	
Pathological Dept., alcohol	7 89	
Pease Foundry Co., fire pot	56 85	
Peckover's Ltd., steel	1,043 50	
Perfection Sanitary Brush Co., brushes	99 08	
N. L. Piper Railway Supply Co., lanterns and supplies	91 98	
Queen City Brass Co., castings	132 06	
Queen City Glass Co., glass	15 15	
Reid & Brown Structural Steel & Iron Works, rollers	356 22	
Renfrew Electric Products Co., heater	205 59	
T. G. Rice Wire Mfg. Co., wire guard	12 50	
Rice, Lewis & Son, hardware	148 33	
R. Robertson & Sons, fire brick	7 00	
Roofers' Supply Co., roofing	2,547 15	
Sanderson, Pearcy & Co., glass, paint, etc.	5,482 27	
Sangamo Electric Co., wire	8 69	
Schaeffer & Budenberg, shorts	8 17	
Sheet Metal Products Co., clock covers, etc	60 57	
Sheldon's Ltd., motor	1,990 63	
H. V. Short Hardware Ltd., hardware	249 48	
R. Simpson Co., wall paper	315 05	
J. B. Smith & Sons, lumber	10,347 71	
N. Smith, belting	16 06	
Soclean Ltd., pails, etc.	30 20	
Standard Foundry. Castings, etc.	106 01	
Stewart & Wood, paints	580 43	
Sturgeons, Ltd., solignum, etc	26 91	
Talbot & Talbot, mop cloths	303 00	
John Taylor & Co., soap	221 02	
Toronto Hydro-Electric System, cable	75 45	
Toronto Plate Glass Co., glass	109 08	
Toronto Sign Co., painting	60 00	
Toronto Welding Co., welding	31 75	
Toronto Wood Turning Co., wood	72 85	
U. S. Industrial Alcohol Co., alcohol	457 33	
Universal Sales Co., cleanser, mops, etc	139 63	
Veterans' Cleanser Supply Co., mops	311 89	
West Disinfecting Co., disinfectants	19 89	
Wilkins Automatic Regulator Co., valves	168 00	
A. R. Williams Machinery Co., machinery	424 40	
C. B. Williams Co., lumber	93 16	
W. C. Wilson & Co., waste	88 05	
University Press, stationery	23 55	
Items under $5.00 (23)	45 85	
Freight charges, etc.	1,219 20	
		$115,197 57
		$128,494 93

Sundry labour, as per pay lists:

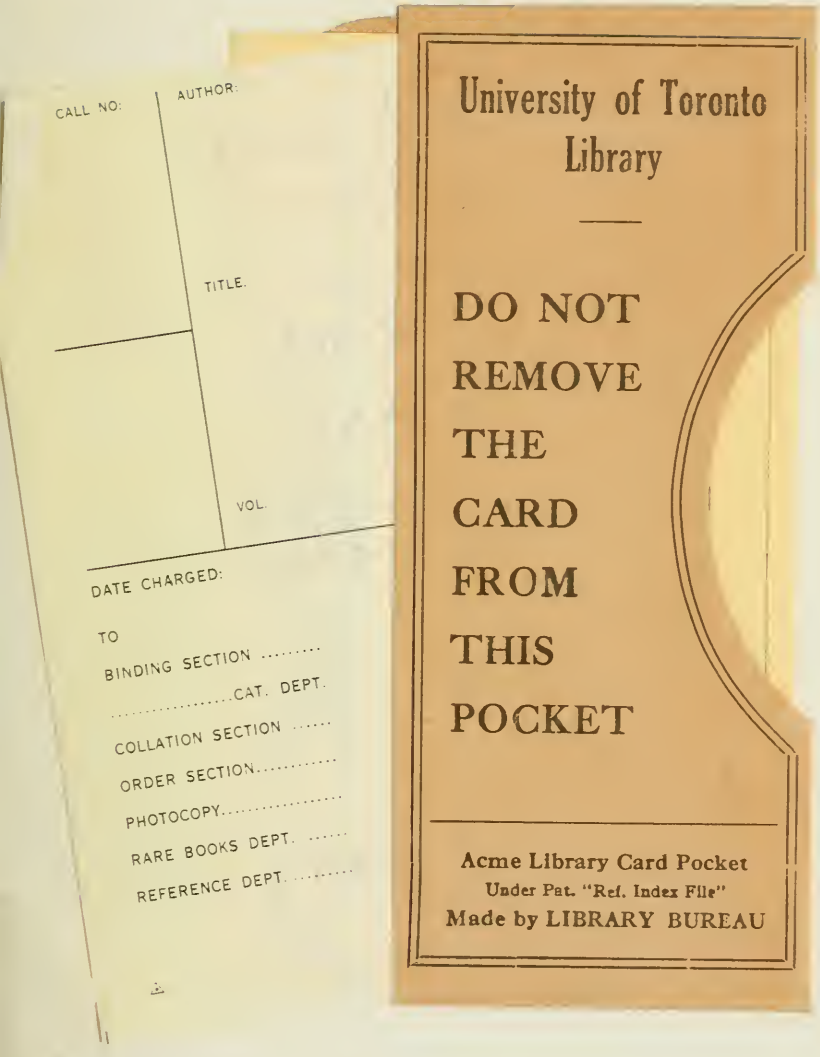
Carpenters	$42,380 37	
Electricians	24,746 10	
Painters	16,757 55	
Plumbers and Steamfitters	31,986 00	
Labourers, firemen, etc.	15,171 93	
Cleaners	32,270 45	
		$163,312 40
		$291,807 33

Superintendent's Stores and Sundry Labour Account.—Continued.

Apportionment of the foregoing:	Labour.	Material.
Administration ($24,468.19):		
Registrar's Office	$6 06	$2 62
Superintendent's Office	1,162 61	.....
Library Building	3,842 97	1,546 92
Library Current	93 06	68 26
Gymnasium and Athletics	981 89	525 30
Convocation Hall	2,337 78	683 73
Grounds	11,683 84	1,266 33
Protective Service	54 85	21 64
Examinations	97 40	
Convocation Expenses	87 47	5 46
Faculty of Arts ($36,217.34):		
Main Building	8,564 93	1,988 33
Biological Building	2,158 64	607 56
Biological Department	1,174 87	872 03
Botany Department	1,957 43	1,563 84
Bio-Chemistry Department	1,701 26	1,475 28
Physiological Department	118 17	187 30
Chemical Building	2,081 46	584 55
Chemical Department	2,824 35	1,932 57
Physical Chemistry Department	49 46	12 54
Physics Building	2,803 89	733 62
Physics Department	463 53	372 16
Astronomy Department	56 27	41 26
Geology Department	16 83	48 95
Mineralogy Department	45 09	147 66
Psychological Department	392 39	222 32
Mechanics Department	49 35	22 65
Political Science Building	488 66	118 74
Political Science Department	94 48	43 77
French Department	.....	40
University College, General expenses	113 00	87 75
Faculty of Medicine ($11,865.22):		
Anatomical Department	196 59	217 44
Pathological Department	326 30	150 02
Pathological Chemistry Department	725 23	788 19
Pharmacy Department	728 21	883 59
Medicine, Department of	39 00	37 17
Maintenance of Building, 1 Queen's Park	360 74	65 23
Surgery Department	5 63	4 00
Hygiene Department	361 54	342 56
Medical Building	3,818 16	773 26
Pathological Building	1,463 25	500 02
General expenses	52 38	26 71
Faculty of Applied Science ($55,907.82):		
Mining Building	3,965 72	1,217 15
Architectural Building	12,985 68	6,129 99
Electrical Engineering Building	2,123 81	533 95
Geodetic Observatory Building	189 69	295 67
Electrical Engineering Department	4,847 31	3,014 50
Mechanical Engineering Department	146 05	120 33
Applied Mechanics Department	601 84	525 58
Mining Engineering Department	1,229 03	941 68
Metallurgical Engineering Department	4,458 24	2,727 42
Surveying Department	912 00	319 09
Applied Chemistry Department	1,086 94	888 93
Electro-Chemistry Department	3,535 84	2,631 17
Architecture Department	18 18	166 50
Drawing Department	134 02	57 57
Engineering Physics Department	24 94	45 55
Photography Department	14 00	14 85
General Expenses	4 60	.....

Superintendent's Stores and Sundry Labour Account.—Continued.

Faculty of Household Science ($3,904.56):			
Household Science Building	$3,051 75	$770 66	
Household Science Department	5 75	18 54	
Food Chemistry Department	26 19	31 67	
Ontario College of Education ($9,628.88):			
Education Building	4,062 45	751 75	
Education Department	2,371 60	2,443 08	
Facultyof Forestry ($1,506.13):			
Forestry Building	834 79	381 40	
Forestry Department	144 58	145 36	
University Extension and Social Service Courses ($534.88):			
University Extension	28 55	13 67	
Social Service Building	186 56	295 45	
Social Service Department	10 65	.....	
Residences ($13.634.68):			
Men's Residences	5,677 60	1,382 19	
Women's Residences	3,732 68	2,120 11	
University College Women's Union	378 29	343 81	
Royal Ontario Museum	8,811 11	3,767 31	
Central Power Plant	6,424 77	8,545 45	
Contingencies and Miscellaneous	175 47	97 24	
Special Research	3,417 49	2,043 54	
University Press	1.439 02	885 95	
Alterations and repairs to sundry properties, various incidental accounts, etc.	23,609 53	46,546 08	
Work done for members of the staff. etc. (including accounts receivable on 30th June, 1921 ($5,241.21)	9,381 14	7,075 59	
Sundry cash sales	.....	2,069 54	
Accounts written off as uncollectable	.....	1 10	
	163,626 88	118,331 15	
			$281,958 03
Ledger Balance 30th. June 1921	.....	.....	$9,849 30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